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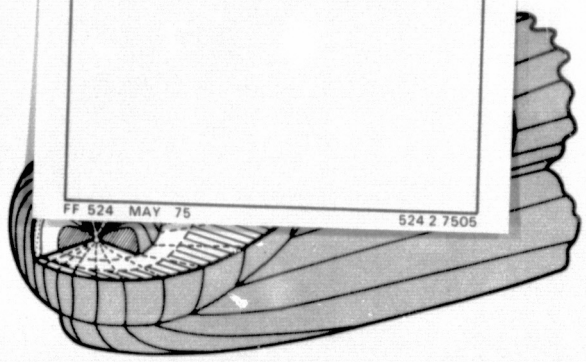

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National Space Science Data Center
Code 601
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IMS/Satellite Situation Center Report

Predicted Orbit Plots for Hawkeye 1 - 1976

REPORT NO. 2

DECEMBER 1975

I. INTRODUCTION

This report contains predicted orbit plots for the Hawkeye 1 satellite for the time period January-December 1976. This satellite has been identified as an important possible contributor to the International Magnetospheric Study (IMS) project. The predicted orbit plots are shown in three projections. The time period covered by each set of projections is 2 days 1 hour, corresponding approximately to the period of Hawkeye 1. The three coordinate systems used are the Geocentric Solar Ecliptic system (GSE), the Geocentric Solar Magnetospheric system (GSM), and the Solar Magnetic system (SM).

For the GSE system, the X-axis is along the Earth-Sun line toward the Sun, and the Z-axis is perpendicular to the ecliptic plane such that the Y-axis is toward dusk. The GSE projection at the top left of the set of three plots shows the satellite trajectory rotated into the X-Y plane in order to illustrate the relative positions of the satellite and the bow shock and magnetopause boundaries. Fairfield's model (1971) for the average position of these boundaries has been used. This model corresponds to a solar wind velocity of 420 km/sec. For positive X values, a spherical rotation of the satellite radius vector has been performed at constant ecliptic longitude. For negative X values, a cylindrical rotation of the Y and Z components of the radius vector has been performed at constant X.

For the GSM system, the X-axis is along the Earth-Sun line toward the Sun, and the X-Z plane contains the geomagnetic dipole such that the Z-axis is positive northward and the Y-axis is toward dusk. The GSM projection at the top right of the set of three plots shows the satellite trajectory projected onto the Y-Z plane in order to show the relative position of the satellite and the neutral sheet. A simple model for the neutral sheet is assumed: the sheet is hinged onto the geomagnetic equator at 10 Earth radii in the antisolar direction and lies in the GSM X-Y plane. The neutral sheet positions are shown as horizontal lines corresponding to six equally spaced times of the first day covered by the plot. The extent of the horizontal lines in Y has no significance. The projected trajectories are shown as solid lines for $X < -10$ Earth radii and as dashed lines for $X > -10$ Earth radii. The dashed lines indicate that the satellite is not in the region of the neutral sheet regardless of Z values.

For the SM system, the Z-axis contains the north magnetic pole, and the Y-axis is perpendicular to the Earth-Sun line toward dusk. The satellite trajectory is shown at the bottom of the set of three plots as magnetic latitude and magnetic local time. These values of magnetic latitude and magnetic local time use SM latitude and longitude as a basis.

For each of the three projections, time ticks and codes are given on the satellite trajectories. The codes are interpreted in the table at the base of each plot. Time is given in the table as year/day/decimal

hour. The total time covered by each plot is shown at the bottom of each table. An additional variable is given in the table for each time tick. For the GSM and SM projection this variable is the geocentric distance to the satellite in Earth radii, and for the GSE projection the variable is satellite ecliptic latitude in degrees.

For the orbit predictions shown in this report actual spacecraft elements for epoch April 1975 were used. The predicted elements for January 1, 1976, are shown in Table 1.

II. HAWKEYE 1 ORBIT CHARACTERISTICS FOR 1976

The high inclination of the Hawkeye 1 satellite precludes neutral sheet encounters, and thus the GSM projections shown in this report are of limited value. However, the precession of apogee in longitude provides a number of extremely useful cusp passes, magnetosheath passes, magnetopause passes, and bow shock encounters throughout 1976. It should be noted that the Hawkeye 1 satellite is the only satellite that potentially provides good coverage of the direct access region in 1976, and is therefore particularly important to the IMS in this respect.

II.1 Cusp Passes

For the present purposes the direct access or cusp region is taken as that given by Heikkila (1972) for low-energy particles and extends over the magnetic latitude range, 75° to 80° north, and over the local magnetic time range, 8 hours to 16 hours. In addition, the access region is bounded by the magnetopause boundary given by Fairfield's model (1971). Note that the Hawkeye 1 satellite is not well suited for observing the corresponding access region in the Southern Hemisphere. Fifteen Hawkeye 1 passes through the direct access region have been identified for 1976 and are summarized in Table 2. The passes indicated in this table are those with duration greater than 3 hours. There are many other passes of shorter duration in 1976. The table shows approximate entry and exit times and time in the cusp region, together with the approximate altitude range covered. The first altitude given corresponds to the entry time. Most of the passes are in pairs corresponding to consecutive revolutions, and it is evident from the table that most occur in the first 3 months of 1976. As apogee precesses away from the direct access region early in the year into the interplanetary medium in March, the altitude range covered by the Hawkeye 1 direct access passes becomes progressively lower.

II.2 Magnetopause and Bow Shock Crossings

The Hawkeye 1 satellite encounters the model magnetosphere boundary twice per revolution (period = 2871 min) throughout 1976.

Table 3 is a summary of these magnetopause crossings that shows, for any given time period, the quadrants in which these encounters occur. Over the time periods Day 5-222 and Day 339-366, Hawkeye 1 is in interplanetary space for a variable portion of each revolution. Over the same time period, therefore, there are two bow shock encounters per revolution. These encounters occur for positive X_{GSE} only. The quadrants in which the encounters occur are summarized in Table 4. Over the time periods Day 222-240 and Day 300-339, the Hawkeye 1 trajectory is particularly suitable for observing the magnetosheath. For these time periods the satellite spends between 17 hours and 22 hours per revolution in this region. For the first time period the passes are predominantly in the noon/dawn and dawn/midnight quadrants, and for the second time period in the midnight/dusk and dusk/noon quadrants.

III. SPACECRAFT AND EXPERIMENT STATUS

The Hawkeye 1 satellite carries three experiments, all of interest to IMS participants: low-energy electron and proton analyzers (L. A. Frank), ELF/VLF receivers (D. A. Gurnett), and a triaxial fluxgate magnetometer (J. A. Van Allen). Note that of these three principal investigators only D. A. Gurnett appears in the IMS Directory (IMS Program Summary No. 0181). Brief descriptions of these experiments are given in pages 7-9. At the present time these experiments are functioning normally. However, data are presently being taken from Hawkeye 1 only approximately 50 percent of the time (see brief descriptions for details). Further, the present plans are to terminate Hawkeye 1 operations during July 1976. However, it is hoped that the obvious contribution of the satellite to the IMS project will result in continued operation at least on a partial basis.

IV. FUTURE OPERATIONS

The Satellite Situation Center (SSC) maintains orbit prediction plots on 16-mm microfilm for Hawkeye 1 of the type shown in this document for the time period January 1977 through May 1978, when the satellite is expected to reenter. These plots may be obtained upon request.

REFERENCES

1. Fairfield, D. H., "Average and Unusual Locations of the Earth's Magnetopause and Bow Shock," J. Geophys. Res., 76, 28, 6700, October 1971.

2. Heikkila, W., "Penetration of Particles into the Polar Cap Regions of the Magnetosphere," Critical Problems of Magnetospheric Physics, Proceedings of the Joint COSPAR/IAGA/URSI Symposium, Madrid, May 1972.

Table 1. ORBIT PARAMETER SUMMARY TABLE FOR HAWKEYE 1

Alternate Satellite Names	Injun-F Neutral Point Explorer Explorer 52
International ID	74-040A
Epoch (YY-MM-DD-HH-MM)	76-01-01-00-00
Period (min)	2871
Eccentricity	.847
Inclination (deg)	88.5
R.A. of Ascending Node (deg)	287.74
Argument of Perigee (deg)	253.99
Mean Anomaly (deg)	257.89
Semimajor Axis (km)	70040.147
Perigee Height (km)	4336.88
Apogee Height (km)	122987.081
Local Time of Apogee (HH-MM)	12-36
Latitude of Perigee (deg)	-73.35

Table 2. MAJOR CUSP PASSES FOR HAWKEYE 1 IN 1976

Entry Time (day/hr)	Exit Time (day/hr)	Time in Cusp (hr)	Altitude Range (Earth radii)
2/23.0	3/7.0	8.0	19 - 14.3
5/ 4.0	5/8.0	4.0	17.7 - 15.8
17/23.0	18/7.0	8.0	17.8 - 13.2
20/ 4.0	20/8.0	4.0	17.1 - 14.9
33/ 0.0	33/6.0	6.0	16.8 - 12.8
35/ 3.0	35/7.5	4.5	16.9 - 14.2
48/ 0.0	48/6.0	6.0	16.0 - 11.5
50/ 2.0	50/7.0	5.0	16.6 - 13.5
63/ 0.0	63/5.0	5.0	15.0 - 11.0
65/ 2.0	65/7.0	5.0	15.9 - 12.2
78/ 1.0	74/4.5	3.5	13.3 - 9.9
80/ 2.0	80/6.0	4.0	15.0 - 11.7
92/23.0	93/2.5	3.5	13.7 - 10.5
351/ 0.0	351/7.0	7.0	16.1 - 10.5
366/ 0.0	366/6.5	6.5	15.0 - 9.3

Table 3. MAGNETOPAUSE CROSSINGS FOR HAWKEYE 1 IN 1976

Time Period (days)	GSE Quadrant			
	Noon/Dawn	Dawn/Midnight	Midnight/Dusk	Dusk/Noon
1-23			1/rev	1/rev
23-76	1/rev		1/rev	
76-121	1/rev			1/rev
121-176		1/rev		1/rev
176-224	1/rev	1/rev		
224-257	1/rev		1/rev	
257-298		1/rev	1/rev	
298-329		1/rev		1/rev
329-366			1/rev	1/rev

Table 4. BOW SHOCK CROSSINGS FOR HAWKEYE 1 IN 1976

Time Period (days)	GSE Quadrant	
	Noon/Dusk	Noon/Dawn
5-33	2/rev	
33-168	1/rev	1/rev
168-222		2/rev
339-366	2/rev	

********** HAWKEYE 1 **********

SPACECRAFT COMMON NAME- HAWKEYE 1
ALTERNATE NAMES- INJUN-F, NEUTRAL POINT EXPLORER
EXPLORER 52
NSSDC ID- 74-040A

LAST REPORTED STATE- LAUNCHED AND OPERATING NORMALLY
AT A SUBSTANDARD DATA ACQUISITION RATE SINCE 07/20/75.

LAUNCH DATE- 06/03/74 SPACECRAFT WEIGHT- 26.1 KG
LAUNCH SITE- VANDENBERG AFB, UNITED STATES
LAUNCH VEHICLE- SCOUT

SPONSORING COUNTRY/AGENCY
UNITED STATES NASA-OSS

INITIAL ORBIT PARAMETERS
ORBIT TYPE- GEOCENTRIC EPOCH DATE- 06/03/74
ORBIT PERIOD- 3032. MIN INCLINATION- 89.78 DEG
PERIAPSIS- 6848. KM ALT APOAPSIS- 131948. KM ALT

RECENT ORBIT PARAMETERS
ORBIT TYPE- GEOCENTRIC EPOCH DATE- 02/25/75
ORBIT PERIOD- 3076.6 MIN INCLINATION- 89.7 DEG
PERIAPSIS- 2998. KM ALT APOAPSIS- 124388. KM ALT

SPACECRAFT PERSONNEL (PM=PROJECT MANAGER, PS=PROJECT SCIENTIST)
PM - J.E. ROGERS .....U OF IOWA
IOWA CITY, IA
PM - C.W. COFFEE, JR. .....NASA-LARC
HAMPTON, VA
PS - J.A. VAN ALLEN .....U OF IOWA
IOWA CITY, IA

SPACECRAFT BRIEF DESCRIPTION
HAWKEYE WAS PART OF THE U.S. CONTRIBUTION TO THE INTERNATIONAL MAGNETOSPHERIC STUDY. THE MAIN PURPOSE OF THIS FLIGHT WAS TO STUDY THE NEUTRAL POINT REGION OF THE MAGNETOSPHERE. THE EXPERIMENTS INCLUDED PARTICLE AND FIELD OBSERVATIONS AND LOW-ENERGY PLASMA STUDIES RELEVANT TO THE DYNAMICS OF SOLAR WIND INJECTION INTO THE MAGNETOSPHERE. THE SPACECRAFT WAS SPIN-STABILIZED WITH A SPIN RATE OF ABOUT 6 RPM AND A SPIN VECTOR PARALLEL TO THE EARTH'S EQUATORIAL PLANE. INITIAL APOGEE POSITION WAS OVER THE EARTH'S POLAR CAP IN THE NOON-DUSK QUADRANT. INITIAL SPACECRAFT AND EXPERIMENT PERFORMANCE WAS NORMAL. IN LATE JULY, 1975, OVERALL DATA COVERAGE WAS REDUCED TO 52 PER CENT BY DELETING COVERAGE WHEN THE SPACECRAFT WAS BEYOND 15 EARTH RADII. APOGEE COVERAGE WAS RESTORED FOR ONE ORBIT IN FIVE ON SEPT 24, 1975.

------- HAWKEYE 1, FRANK -------

EXPERIMENT NAME- LOW-ENERGY PROTONS AND ELECTRONS

NSSDC ID- 74-040A-02

LAST REPORTED STATE- LAUNCHED AND OPERATING NORMALLY
AT A SUBSTANDARD DATA ACQUISITION RATE SINCE 07/20/75.
EXPERIMENT PERSONNEL (PI=PRINCIPAL INVESTIGATOR, TL=TEAM LEADER
OI=OTHER INVESTIGATOR, TM=TEAM MEMBER)

PI - L.A. FRANK .....U OF IOWA
IOWA CITY, IA

OI - J.D. CRAVEN .....U OF IOWA
IOWA CITY, IA

OI - D.M. YEAGER .....U OF IOWA
IOWA CITY, IA

EXPERIMENT BRIEF DESCRIPTION
THIS EXPERIMENT CONSISTED OF ONE LOW-ENERGY PROTON AND ELECTRON DIFFERENTIAL ENERGY ANALYZER (LEPEDEA) ORIENTED PERPENDICULAR TO THE SATELLITE SPIN AXIS. THE LEPEDEA MEASURED PROTONS AND ELECTRONS IN 16 CHANNELS OVER AN ENERGY RANGE OF 50 EV TO 50 KEV. THE EXPERIMENT SURVEYED THE PARTICLE ENVIRONMENT OF THE MAGNETOSPHERE, ESPECIALLY NEAR THE POLAR CUSPS.

------- HAWKEYE 1, GURNETT -------

EXPERIMENT NAME- ELF/VLF RECEIVERS

NSSDC ID- 74-040A-03

LAST REPORTED STATE- LAUNCHED AND OPERATING NORMALLY
AT THE STANDARD DATA ACQUISITION RATE SINCE 06/03/74.
EXPERIMENT PERSONNEL (PI=PRINCIPAL INVESTIGATOR, TL=TEAM LEADER
OI=OTHER INVESTIGATOR, TM=TEAM MEMBER)

PI - D.A. GURNETT .....U OF IOWA
IOWA CITY, IA

OI - G.W. PFEIFFER .....U OF IOWA
IOWA CITY, IA

EXPERIMENT BRIEF DESCRIPTION
THIS EXPERIMENT CONSISTED OF TWO DETECTORS -- (1) A 16-CHANNEL SPECTRUM ANALYZER COVERING THE FREQUENCY RANGE FROM 10 HZ TO 178 KHZ WITH LOGARITHMIC SPACING AND (2) A WIDE-BAND RECEIVER COVERING THE FREQUENCY RANGE FROM 10 HZ TO 10 KHZ. THE SIGNALS FROM THE FIRST DETECTOR WERE SENT TO GROUND STATIONS DIRECTLY IN DIGITAL FORM, WHEREAS THE OUTPUT FROM THE SECOND DETECTOR WAS TRANSMITTED TO GROUND STATIONS IN ANALOG FORM. BOTH DETECTORS WERE USED IN CONNECTION WITH EITHER OF TWO ANTENNAS -- AN ELECTRIC DIPOLE ABOUT 42 METERS IN LENGTH FROM TIP TO TIP AND A SEARCH COIL ANTENNA. THE EXPERIMENT MEASURED PLASMA WAVES IN THE MAGNETOSPHERE ESPECIALLY NEAR THE POLAR CUSPS.

------- HAWKEYE 1, VAN ALLEN ----------

EXPERIMENT NAME- TRIAXIAL FLUXGATE MAGNETOMETER

NSSDC ID- 74-040A-01

LAST REPORTED STATE- LAUNCHED AND OPERATING NORMALLY
AT A SUBSTANDARD DATA ACQUISITION RATE SINCE 07/20/75.

EXPERIMENT PERSONNEL (PI=PRINCIPAL INVESTIGATOR, TL=TEAM LEADER
OI=OTHER INVESTIGATOR, TM=TEAM MEMBER)

PI - J.A. VAN ALLEN .....U OF IOWA
IOWA CITY, IA

OI - M.N. OLIVEN .....U OF IOWA
IOWA CITY, IA

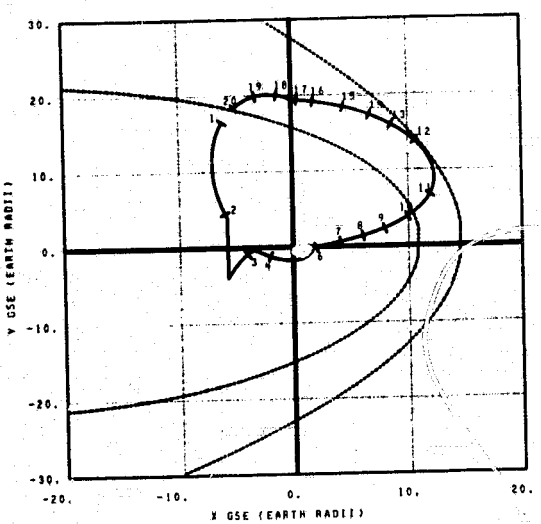
OI - L.J. CAHILL, JR. .....U OF MINNESOTA
MINNEAPOLIS, MN

EXPERIMENT BRIEF DESCRIPTION

THIS EXPERIMENT CONSISTED OF A TRIAXIAL FLUXGATE MAGNETOMETER CAPABLE OF OPERATION AT TWO LEVELS, LOW GAIN AND HIGH GAIN. IN THE HIGH-GAIN MODE THE MAGNETOMETER RANGE IS FROM ABOUT 0.1 TO 100 GAMMA (STRAY SATELLITE MAGNETIC FIELDS ARE TO BE CONSTRAINED TO LESS THAN 0.1 GAMMA). IN THE LOW-GAIN MODE THE MAGNETOMETER RANGE IS FROM 100 TO ABOUT 1000 GAMMA. THE EXPERIMENT SURVEYED THE MAGNETIC FIELDS IN THE MAGNETOSPHERE, ESPECIALLY NEAR THE POLAR CUSPS.

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



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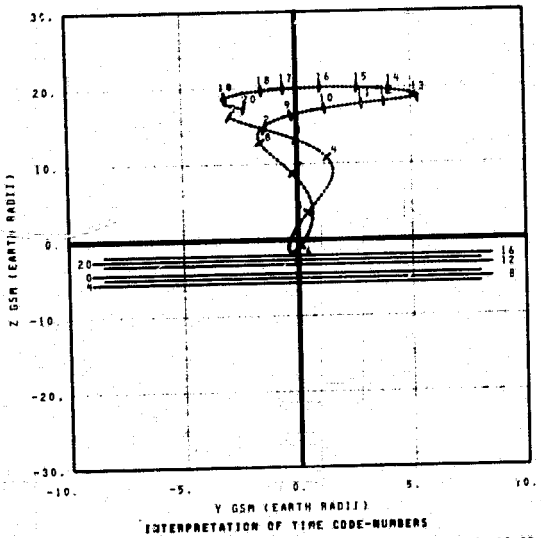
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 1/ 0.00H TO 1976/ 3/ 2.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



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3 - 1976/	1/	4.33H	R=	15.0RE	13 - 1976/	2/	9.67H	R=	19.4RE
4 - 1976/	1/	6.67H	R=	13.0RE	14 - 1976/	2/	13.67H	R=	20.2RE
5 - 1976/	1/	11.75H	R=	6.7RE	15 - 1976/	2/	15.17H	R=	20.3RE
6 - 1976/	1/	15.05H	R=	2.3RE	16 - 1976/	2/	16.67H	R=	20.3RE
7 - 1976/	1/	19.58H	R=	10.0RE	17 - 1976/	2/	18.17H	R=	20.2RE
8 - 1976/	1/	23.00H	R=	13.6RE	18 - 1976/	2/	19.17H	R=	20.1RE
9 - 1976/	2/	3.17H	R=	16.6RE	19 - 1976/	2/	21.67H	R=	19.6RE
10 - 1976/	2/	4.67H	R=	17.5RE	20 - 1976/	3/	1.67H	R=	18.9RE

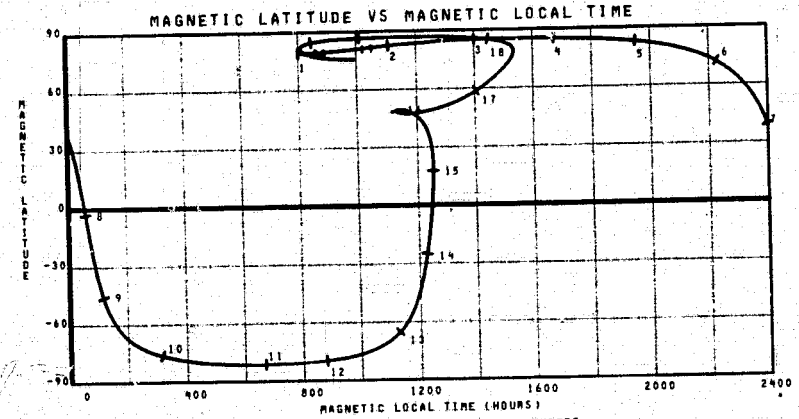
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 1/ 0.00H TO 1976/ 3/ 2.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



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3 - 1976/	1/	5.33H	R=	14.2RE	10 - 1976/	1/	15.52H	R=	1.7RE
4 - 1976/	1/	9.17H	R=	12.5RE	11 - 1976/	1/	14.98H	R=	1.7RE
5 - 1976/	1/	7.17H	R=	12.5RE	12 - 1976/	1/	14.62H	R=	1.7RE
6 - 1976/	1/	9.42H	R=	10.0RE	13 - 1976/	1/	14.73H	R=	1.0RE
7 - 1976/	1/	12.60H	R=	5.2RE	14 - 1976/	1/	15.12H	R=	2.4RE

15 - 1976/	1/	16.17H	R=	4.6RE					
16 - 1976/	1/	23.50H	R=	14.0RE					
17 - 1976/	2/	9.17H	R=	19.3RE					
18 - 1976/	2/	16.67H	R=	20.3RE					
19 - 1976/	2/	18.17H	R=	20.2RE					
20 - 1976/	2/	19.17H	R=	20.1RE					

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 1 / 0.00H TO1976/ 3 / 2.00H

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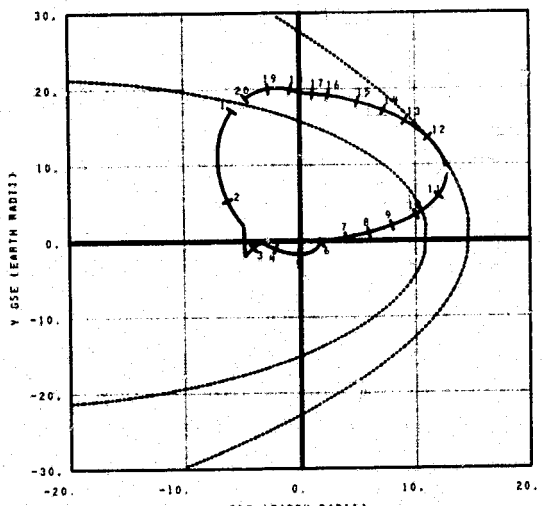
HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



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3 - 1976/	3/	16.33 H	LAT=	11.9	13 - 1976/	4/	9.50 H	LAT=	80.2
4 - 1976/	3/	17.17 H	LAT=	-29.7	14 - 1976/	4/	10.50 H	LAT=	80.8
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7 - 1976/	3/	19.08 H	LAT=	21.4	17 - 1976/	4/	13.00 H	LAT=	81.7
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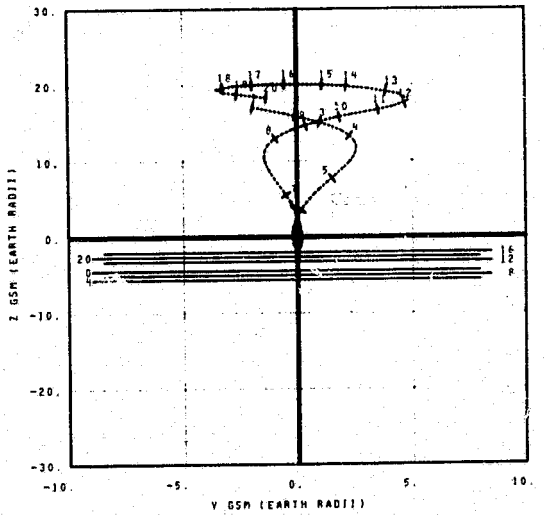
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 3/ 2.00H TO 1976/ 5/ 3.00H

HAWKEYE-1

PROJECTED INTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

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3 - 1976/	3/	5.33 H	R=	16.5 R_E	13 - 1976/	4/	13.50 H	R=	19.4 R_E
4 - 1976/	3/	7.33 H	R=	15.1 R_E	14 - 1976/	4/	15.50 H	R=	20.0 R_E
5 - 1976/	3/	12.33 H	R=	10.4 R_E	15 - 1976/	4/	16.50 H	R=	20.1 R_E
6 - 1976/	3/	15.00 H	R=	6.7 R_E	16 - 1976/	4/	18.00 H	R=	20.2 R_E
7 - 1976/	3/	20.92 H	R=	7.3 R_E	17 - 1976/	4/	19.50 H	R=	20.3 R_E
8 - 1976/	4/	2.33 H	R=	13.7 R_E	18 - 1976/	4/	21.50 H	R=	20.2 R_E
9 - 1976/	4/	4.17 H	R=	15.1 R_E	19 - 1976/	5/	1.50 H	R=	19.9 R_E
10 - 1976/	4/	5.67 H	R=	16.2 R_E	20 - 1976/	5/	3.00 H	R=	19.1 R_E

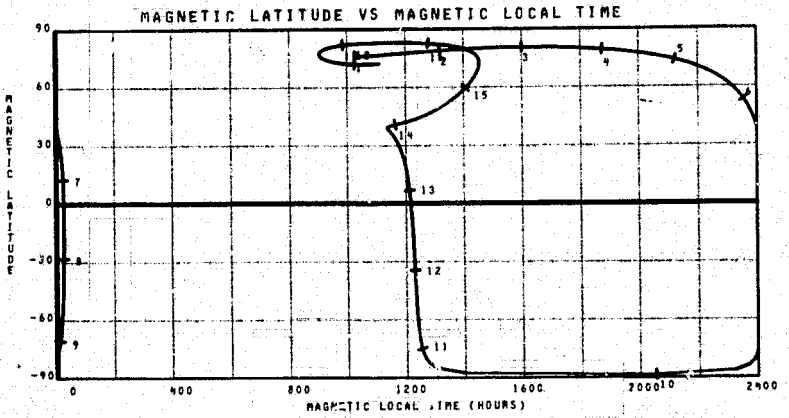
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 3/ 2.00H TO 1976/ 5/ 3.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

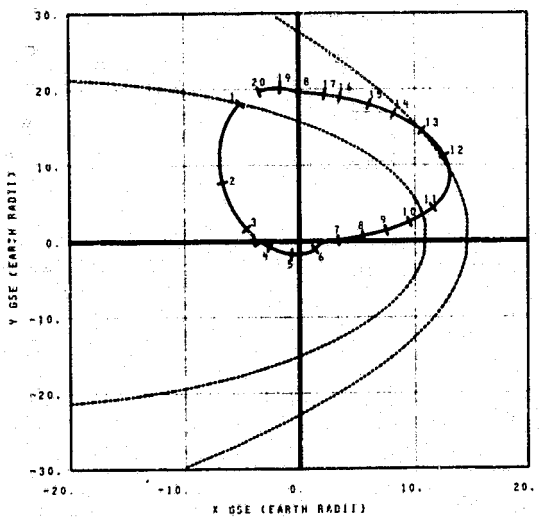
1 - 1976/	3/	2.17 H	R=	18.1 R_E	8 - 1976/	3/	17.33 H	R=	2.1 R_E	15 - 1976/	4/	18.50 H	R=	18.6 R_E
2 - 1976/	3/	9.33 H	R=	16.5 R_E	9 - 1976/	3/	17.67 H	R=	1.7 R_E	16 - 1976/	4/	17.00 H	R=	20.7 R_E
3 - 1976/	3/	7.17 H	R=	15.3 R_E	10 - 1976/	3/	17.78 H	R=	1.7 R_E	17 - 1976/	4/	19.00 H	R=	20.3 R_E
4 - 1976/	3/	8.67 H	R=	14.1 R_E	11 - 1976/	3/	17.88 H	R=	1.7 R_E	18 - 1976/	5/	1.50 H	R=	19.9 R_E
5 - 1976/	3/	10.50 H	R=	12.4 R_E	12 - 1976/	3/	18.22 H	R=	2.2 R_E					
6 - 1976/	3/	14.00 H	R=	8.1 R_E	13 - 1976/	3/	19.00 H	R=	3.8 R_E					
7 - 1976/	3/	16.67 H	R=	3.5 R_E	14 - 1976/	4/	2.33 H	R=	13.7 R_E					

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 3 / 2.00H TO1976/ 5 / 3.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/	5/ 3.50 H	LAT= 72.3	11 - 1976/	6/ 9.17 H	LAT= 66.9
2 - 1976/	5/ 19.67 H	LAT= 90.0	12 - 1976/	6/ 17.50 H	LAT= 77.5
3 - 1976/	5/ 19.67 H	LAT= 19.6	13 - 1976/	6/ [illegible] H	LAT= 79.7
4 - 1976/	5/ 20.25 H	LAT= -15.6	14 - 1976/	6/ 1[illegible] H	LAT= 80.8
5 - 1976/	5/ 20.78 H	LAT= -65.6	15 - 1976/	6/ 1[illegible].67 H	LAT= 81.3
6 - 1976/	5/ 21.00 H	LAT= -77.0	16 - 1976/	6/ 19.67 H	LAT= 81.6
7 - 1976/	5/ 22.00 H	LAT= 11.3	17 - 1976/	6/ 16.17 H	LAT= 81.7
8 - 1976/	5/ 23.00 H	LAT= 36.9	18 - 1976/	6/ 17.17 H	LAT= 81.7
9 - 1976/	6/ 0.33 H	LAT= 49.9	19 - 1976/	6/ 21.17 H	LAT= 80.5
10 - 1976/	6/ 1.92 H	LAT= 59.1	20 - 1976/	7/ 2.17 H	LAT= 76.9

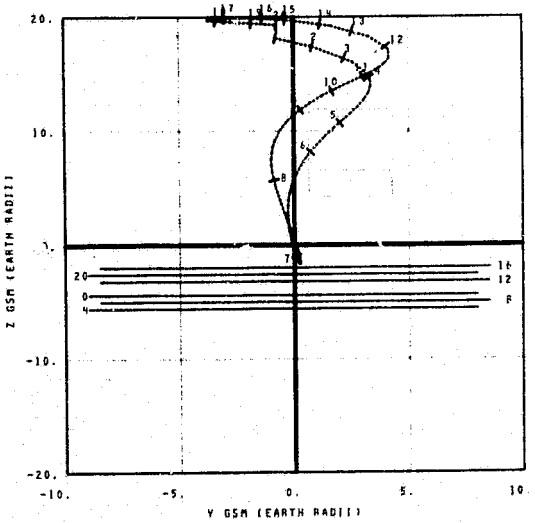
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 5/ 3.00H TO 1976/ 7/ 4.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/	5/ 3.50 H	R= 18.9 R_E	11 - 1976/	6/ 7.83 H	R= 15.5 R_E
2 - 1976/	5/ 5.00 H	R= 18.3 R_E	12 - 1976/	6/ 12.17 H	R= 18.0 R_E
3 - 1976/	5/ 6.50 H	R= 17.6 R_E	13 - 1976/	6/ 14.67 H	R= 19.0 R_E
4 - 1976/	5/ 8.67 H	R= 16.4 R_E	14 - 1976/	6/ 16.17 H	R= 19.4 R_E
5 - 1976/	5/ 13.17 H	R= 13.0 R_E	15 - 1976/	6/ 17.67 H	R= 19.8 R_E
6 - 1976/	5/ 15.33 H	R= 10.7 R_E	16 - 1976/	6/ 18.67 H	R= 20.0 R_E
7 - 1976/	5/ 20.33 H	R= 2.6 R_E	17 - 1976/	6/ 20.67 H	R= 20.2 R_E
8 - 1976/	6/ 0.25 H	R= 7.5 R_E	18 - 1976/	7/ 0.67 H	R= 20.2 R_E
9 - 1976/	6/ 4.50 H	R= 12.7 R_E	19 - 1976/	7/ 2.67 H	R= 19.7 R_E
10 - 1976/	6/ 6.17 H	R= 14.2 R_E	20 - 1976/	7/ 3.67 H	R= 19.7 R_E

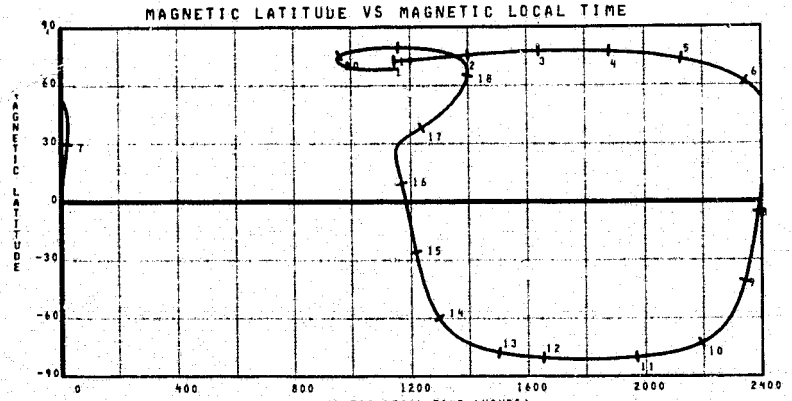
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 5/ 3.00H TO 1976/ 7/ 4.03H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

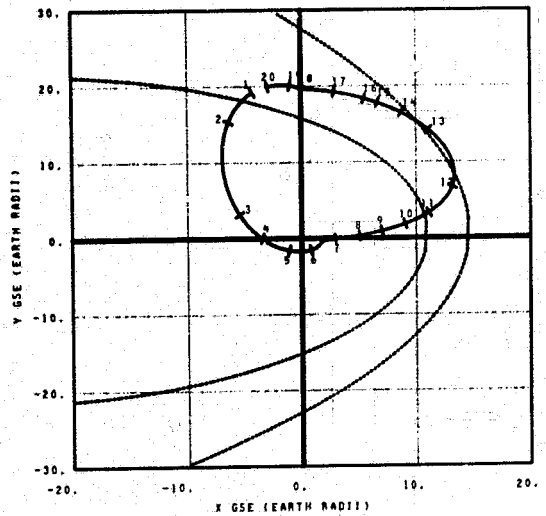
1 - 1976/	5/ 3.50 H	R= 18.9 R_E	8 - 1976/	5/ 20.33 H	R= 2.6 R_E	15 - 1976/	5/ 21.63 H	R= 2.6 R_E
2 - 1976/	5/ 6.50 H	R= 17.6 R_E	9 - 1976/	5/ 20.72 H	R= 1.9 R_E	16 - 1976/	5/ 22.75 H	R= 4.9 R_E
3 - 1976/	5/ 8.50 H	R= 16.5 R_E	10 - 1976/	5/ 20.95 H	R= 1.7 R_E	17 - 1976/	6/ 3.58 H	R= 13.6 R_E
4 - 1976/	5/ 10.17 H	R= 15.1 R_E	11 - 1976/	5/ 21.02 H	R= 1.7 R_E	18 - 1976/	6/ 12.67 H	R= 18.2 R_E
5 - 1976/	5/ 12.17 H	R= 13.5 R_E	12 - 1976/	5/ 21.07 H	R= 1.7 R_E	19 - 1976/	6/ 17.67 H	R= 19.8 R_E
6 - 1976/	5/ 15.33 H	R= 10.7 R_E	13 - 1976/	5/ 21.10 H	R= 1.7 R_E	20 - 1976/	6/ 20.67 H	R= 20.2 R_E
7 - 1976/	5/ 19.33 H	R= 4.6 R_E	14 - 1976/	5/ 21.25 H	R= 1.9 R_E			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 5/ 3.00H TO1976/ 7/ 4.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/	7/ 9.17H	LAT= 75.0	11 - 1976/	8/ 6.67H	LAT= 69.7
2 - 1976/	7/ 11.67H	LAT= 65.9	12 - 1976/	8/ 10.17H	LAT= 73.8
3 - 1976/	7/ 21.67H	LAT= 29.9	13 - 1976/	8/ 15.50H	LAT= 79.8
4 - 1976/	7/ 23.17H	LAT= -8.9	14 - 1976/	8/ 17.00H	LAT= 80.8
5 - 1976/	7/ 23.92H	LAT= -59.7	15 - 1976/	8/ 18.00H	LAT= 81.3
6 - 1976/	8/ 0.18H	LAT= -80.6	16 - 1976/	8/ 18.50H	LAT= 81.5
7 - 1976/	8/ 0.97H	LAT= -8.6	17 - 1976/	8/ 19.50H	LAT= 81.7
8 - 1976/	8/ 2.00H	LAT= 31.9	18 - 1976/	8/ 20.50H	LAT= 81.7
9 - 1976/	8/ 3.17H	LAT= 46.6	19 - 1976/	8/ 23.00H	LAT= 81.2
10 - 1976/	8/ 4.67H	LAT= 56.7	20 - 1976/	9/ 9.00H	LAT= 78.1

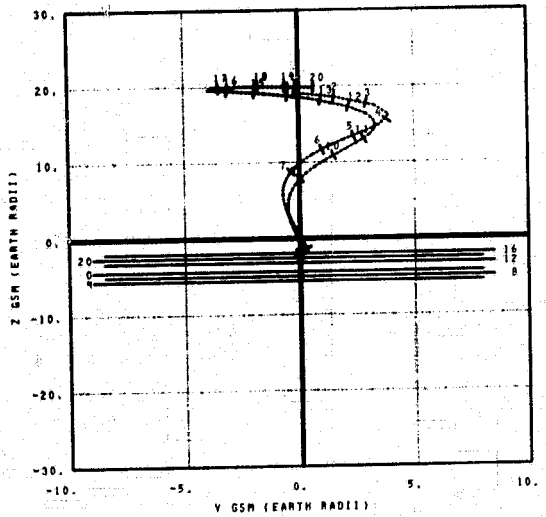
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 7/ 9.00H TO 1976/ 9/ 5.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/	7/ 9.17H	R= 19.6RE	11 - 1976/	8/ 9.17H	R= 14.0RE
2 - 1976/	7/ 5.67H	R= 19.2RE	12 - 1976/	8/ 14.50H	R= 17.5RE
3 - 1976/	7/ 7.17H	R= 18.7RE	13 - 1976/	8/ 16.00H	R= 18.2RE
4 - 1976/	7/ 10.67H	R= 17.1RE	14 - 1976/	8/ 17.50H	R= 18.8RE
5 - 1976/	7/ 13.67H	R= 15.2RE	15 - 1976/	8/ 19.00H	R= 19.3RE
6 - 1976/	7/ 15.67H	R= 13.6RE	16 - 1976/	8/ 20.50H	R= 19.7RE
7 - 1976/	7/ 18.17H	R= 11.1RE	17 - 1976/	9/ 1.00H	R= 20.3RE
8 - 1976/	7/ 23.75H	R= 2.2RE	18 - 1976/	9/ 3.00H	R= 20.2RE
9 - 1976/	8/ 9.75H	R= 9.3RE	19 - 1976/	9/ 4.00H	R= 20.2RE
10 - 1976/	8/ 7.00H	R= 12.0RE	20 - 1976/	9/ 5.00H	R= 20.1RE

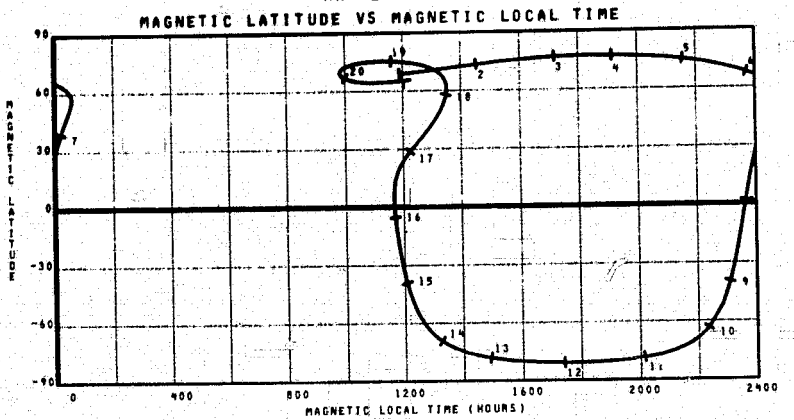
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 7/ 9.00H TO 1976/ 9/ 5.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

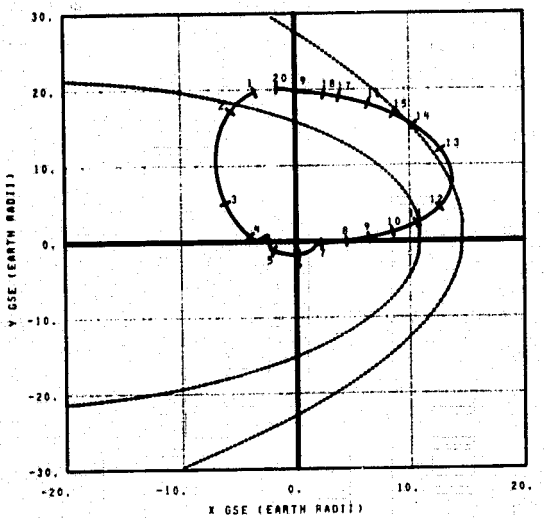
1 - 1976/	7/ 9.17H	R= 19.6RE	8 - 1976/	7/ 23.58H	R= 2.9RE	15 - 1976/	8/ 0.00H	R= 2.9RE
2 - 1976/	7/ 7.67H	R= 18.9RE	9 - 1976/	7/ 24.00H	R= 1.8RE	16 - 1976/	8/ 1.67H	R= 4.9RE
3 - 1976/	7/ 10.17H	R= 17.4RE	10 - 1976/	8/ 0.17H	R= 1.7RE	17 - 1976/	8/ 9.67H	R= 19.3RE
4 - 1976/	7/ 11.67H	R= 16.6RE	11 - 1976/	8/ 0.28H	R= 1.7RE	18 - 1976/	8/ 12.00H	R= 16.1RE
5 - 1976/	7/ 13.67H	R= 15.2RE	12 - 1976/	8/ 0.33H	R= 1.7RE	19 - 1976/	8/ 17.50H	R= 10.0RE
6 - 1976/	7/ 16.67H	R= 12.7RE	13 - 1976/	8/ 0.38H	R= 1.8RE	20 - 1976/	8/ 23.50H	R= 20.2RE
7 - 1976/	7/ 22.50H	R= 4.7RE	14 - 1976/	8/ 0.47H	R= 1.9RE			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 7/ 9.00H TO1976/ 9/ 5.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETAYION OF TIME CODE-NUMBERS

1 - 1976/	9/	5.50 H	LAT=	76.8	11 - 1976/	10/	9.17 H	LAT= 42.2
2 - 1976/	9/	12.00 H	LAT=	70.0	12 - 1976/	10/	11.67 H	LAT= 49.9
3 - 1976/	9/	23.83 H	LAT=	39.3	13 - 1976/	10/	17.67 H	LAT= 78.8
4 - 1976/	10/	2.00 H	LAT=	9.0	14 - 1976/	10/	19.67 H	LAT= 80.9
5 - 1976/	10/	2.92 H	LAT=	-32.8	15 - 1976/	10/	20.67 H	LAT= 81.0
6 - 1976/	10/	3.38 H	LAT=	-61.6	16 - 1976/	10/	21.67 H	LAT= 81.9
7 - 1976/	10/	3.67 H	LAT=	-23.8	17 - 1976/	10/	22.67 H	LAT= 81.7
8 - 1976/	10/	4.92 H	LAT=	25.6	18 - 1976/	10/	23.17 H	LAT= 81.7
9 - 1976/	10/	6.00 H	LAT=	42.7	19 - 1976/	11/	0.17 H	LAT= 81.7
10 - 1976/	10/	7.42 H	LAT=	54.1	20 - 1976/	11/	4.17 H	LAT= 80.2

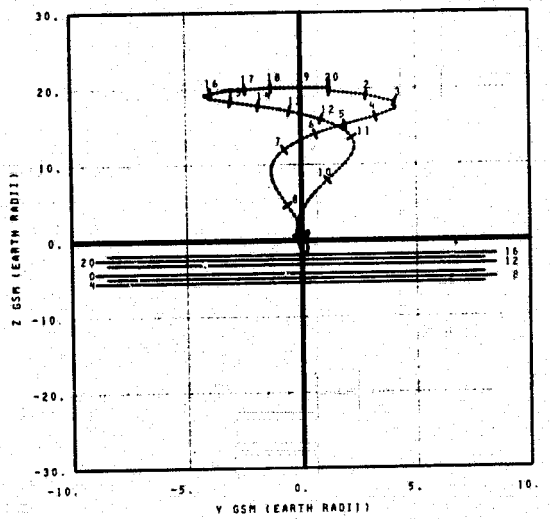
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 9/ 5.00H TO 1976/ 11/ 6.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/	9/	5.50 H	R= 20.0 RE	11 - 1976/	10/	12.83 H	R= 14.4 RE
2 - 1976/	9/	7.00 H	R= 19.7 RE	12 - 1976/	10/	15.50 H	R= 16.3 RE
3 - 1976/	9/	9.00 H	R= 19.2 RE	13 - 1976/	10/	17.17 H	R= 17.3 RE
4 - 1976/	9/	13.00 H	R= 17.6 RE	14 - 1976/	10/	18.67 H	R= 18.0 RE
5 - 1976/	9/	14.83 H	R= 16.6 RE	15 - 1976/	10/	20.17 H	R= 18.6 RE
6 - 1976/	9/	16.50 H	R= 15.5 RE	16 - 1976/	11/	0.67 H	R= 19.9 RE
7 - 1976/	9/	18.67 H	R= 13.8 RE	17 - 1976/	11/	2.67 H	R= 20.2 RE
8 - 1976/	10/	0.00 H	R= 7.6 RE	18 - 1976/	11/	3.67 H	R= 20.2 RE
9 - 1976/	10/	4.67 H	R= 3.4 RE	19 - 1976/	11/	4.67 H	R= 20.3 RE
10 - 1976/	10/	8.00 H	R= 9.5 RE	20 - 1976/	11/	5.67 H	R= 20.3 RE

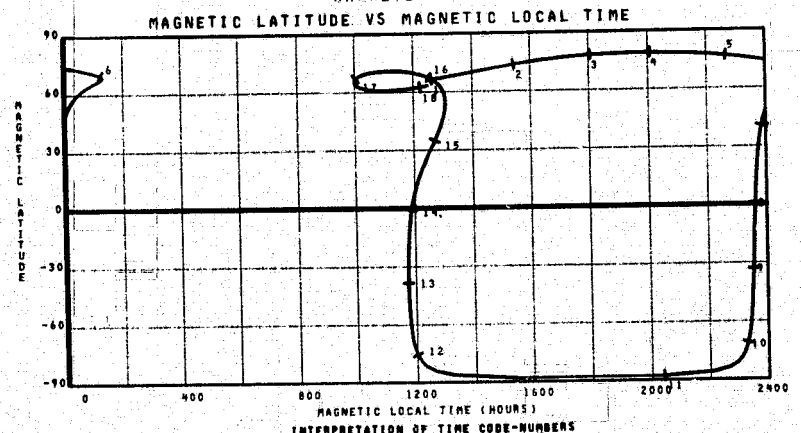
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 9/ 5.00H TO 1976/ 11/ 6.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

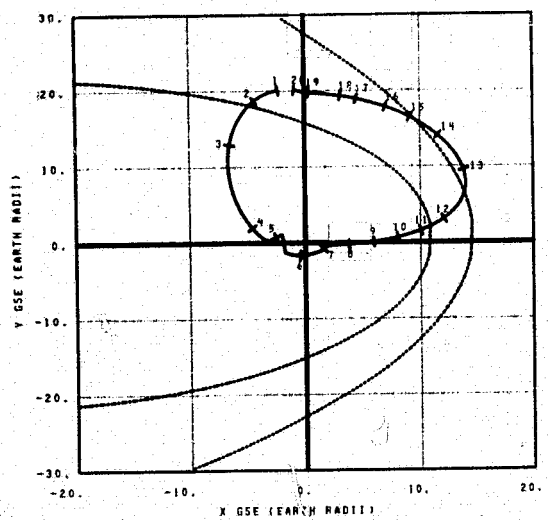
1 - 1976/	9/	5.50 H	R= 20.0 RE	8 - 1976/	10/	2.92 H	R= 2.3 RE	15 - 1976/	10/	9.00 H	R= 10.6 RE
2 - 1976/	9/	9.50 H	R= 19.0 RE	9 - 1976/	10/	3.22 H	R= 1.0 RE	16 - 1976/	10/	15.50 H	R= 16.3 RE
3 - 1976/	9/	12.00 H	R= 18.1 RE	10 - 1976/	10/	3.47 H	R= 1.7 RE	17 - 1976/	10/	21.17 H	R= 19.4 RE
4 - 1976/	9/	13.50 H	R= 17.3 RE	11 - 1976/	10/	3.58 H	R= 1.8 RE	18 - 1976/	11/	5.17 H	R= 20.3 RE
5 - 1976/	9/	15.67 H	R= 16.1 RE	12 - 1976/	10/	3.78 H	R= 1.9 RE				
6 - 1976/	9/	20.67 H	R= 11.9 RE	13 - 1976/	10/	4.12 H	R= 2.7 RE				
7 - 1976/	10/	2.00 H	R= 4.0 RE	14 - 1976/	10/	5.25 H	R= 5.0 RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 9 / 5.00H TO1976/ 11 / 6.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 11/	6.17 H	LAT=	78.9	11 - 1976/ 12/	11.83 H	LAT=	59.9
2 - 1976/ 11/	12.17 H	LAT=	73.6	12 - 1976/ 12/	14.00 H	LAT=	67.2
3 - 1976/ 11/	21.00 H	LAT=	60.9	13 - 1976/ 12/	19.67 H	LAT=	77.4
4 - 1976/ 12/	4.75 H	LAT=	21.1	14 - 1976/ 12/	22.50 H	LAT=	80.1
5 - 1976/ 12/	5.92 H	LAT=	-16.1	15 - 1976/ 12/	24.00 H	LAT=	81.0
6 - 1976/ 12/	6.50 H	LAT=	-73.5	16 - 1976/ 13/	1.00 H	LAT=	81.4
7 - 1976/ 12/	6.73 H	LAT=	-86.6	17 - 1976/ 13/	2.00 H	LAT=	81.7
8 - 1976/ 12/	7.03 H	LAT=	17.3	18 - 1976/ 13/	2.50 H	LAT=	81.7
9 - 1976/ 12/	8.92 H	LAT=	39.1	19 - 1976/ 13/	3.50 H	LAT=	81.7
10 - 1976/ 12/	10.25 H	LAT=	51.5	20 - 1976/ 13/	6.00 H	LAT=	81.8

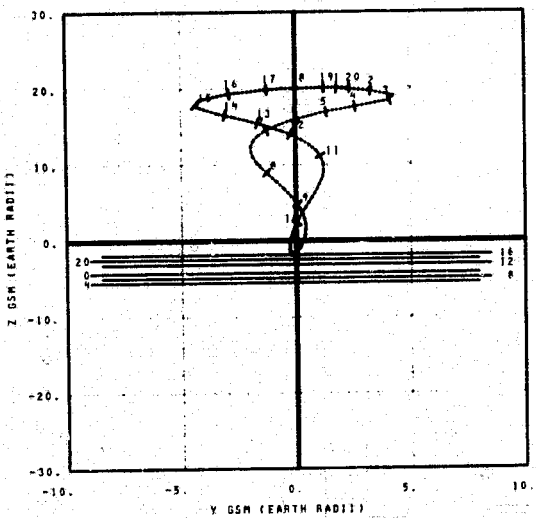
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 11/ 6.00H TO 1976/ 13/ 7.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 11/	6.17 H	R=	20.2 R_E	11 - 1976/ 12/	13.67 H	R=	12.2 R_E
2 - 1976/ 11/	7.67 H	R=	20.1 R_E	12 - 1976/ 12/	16.33 H	R=	14.6 R_E
3 - 1976/ 11/	11.67 H	R=	19.4 R_E	13 - 1976/ 12/	18.17 H	R=	15.9 R_E
4 - 1976/ 11/	14.17 H	R=	18.5 R_E	14 - 1976/ 12/	20.00 H	R=	17.0 R_E
5 - 1976/ 11/	15.67 H	R=	17.9 R_E	15 - 1976/ 12/	23.00 H	R=	18.3 R_E
6 - 1976/ 11/	17.17 H	R=	17.1 R_E	16 - 1976/ 13/	2.50 H	R=	19.4 R_E
7 - 1976/ 11/	19.17 H	R=	15.9 R_E	17 - 1976/ 13/	4.00 H	R=	19.9 R_E
8 - 1976/ 12/	0.50 H	R=	11.2 R_E	18 - 1976/ 13/	5.00 H	R=	20.1 R_E
9 - 1976/ 12/	3.25 H	R=	7.7 R_E	19 - 1976/ 13/	6.00 H	R=	20.2 R_E
10 - 1976/ 12/	8.33 H	R=	4.8 R_E	20 - 1976/ 13/	7.00 H	R=	20.2 R_E

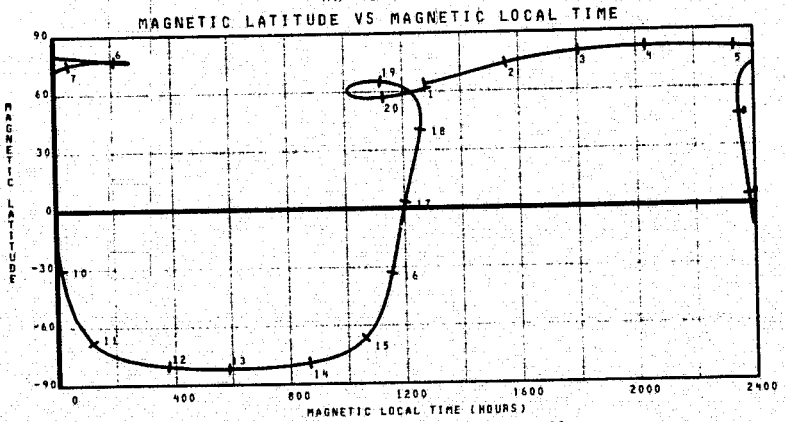
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 11/ 6.00H TO 1976/ 13/ 7.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

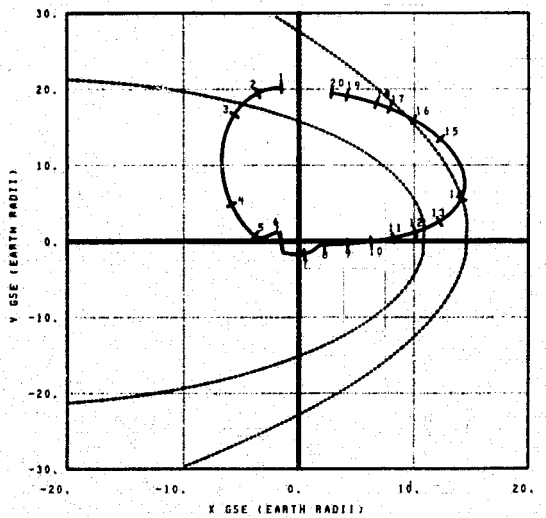
1 - 1976/ 11/	6.17 H	R=	20.2 R_E	8 - 1976/ 12/	5.17 H	R=	4.3 R_E	15 - 1976/ 12/	6.97 H	R=	2.0 R_E
2 - 1976/ 11/	10.67 H	R=	19.4 R_E	9 - 1976/ 12/	6.08 H	R=	2.4 R_E	16 - 1976/ 12/	7.37 H	R=	2.8 R_E
3 - 1976/ 11/	13.17 H	R=	18.9 R_E	10 - 1976/ 12/	6.42 H	R=	1.8 R_E	17 - 1976/ 12/	8.42 H	R=	4.9 R_E
4 - 1976/ 11/	14.67 H	R=	18.3 R_E	11 - 1976/ 12/	6.67 H	R=	1.7 R_E	18 - 1976/ 12/	11.67 H	R=	9.9 R_E
5 - 1976/ 11/	16.67 H	R=	17.4 R_E	12 - 1976/ 12/	6.77 H	R=	1.7 R_E	19 - 1976/ 12/	17.67 H	R=	15.6 R_E
6 - 1976/ 11/	20.33 H	R=	15.0 R_E	13 - 1976/ 12/	6.80 H	R=	1.8 R_E	20 - 1976/ 13/	3.50 H	R=	19.8 R_E
7 - 1976/ 12/	2.50 H	R=	8.7 R_E	14 - 1976/ 12/	6.85 H	R=	1.8 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 11 / 6.00H TO1976/ 13 / 7.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 13/ 7.50 H	LAT= 80.2	11 - 1976/ 14/ 13.50 H	LAT= 52.2
2 - 1976/ 13/ 13.00 H	LAT= 76.0	12 - 1976/ 14/ 15.00 H	LAT= 60.0
3 - 1976/ 13/ 19.50 H	LAT= 68.7	13 - 1976/ 14/ 17.17 H	LAT= 66.9
4 - 1976/ 14/ 6.50 H	LAT= 37.7	14 - 1976/ 14/ 20.33 H	LAT= 73.7
5 - 1976/ 14/ 8.50 H	LAT= 7.1	15 - 1976/ 15/ 1.67 H	LAT= 80.0
6 - 1976/ 14/ 9.42 H	LAT= -37.8	16 - 1976/ 15/ 3.17 H	LAT= 81.8
7 - 1976/ 14/ 9.83 H	LAT= -81.1	17 - 1976/ 15/ 4.17 H	LAT= 81.4
8 - 1976/ 14/ 10.38 H	LAT= -24.3	18 - 1976/ 15/ 4.67 H	LAT= 81.6
9 - 1976/ 14/ 11.25 H	LAT= 22.9	19 - 1976/ 15/ 5.67 H	LAT= 81.7
10 - 1976/ 14/ 12.33 H	LAT= 41.4	20 - 1976/ 15/ 6.17 H	LAT= 81.7

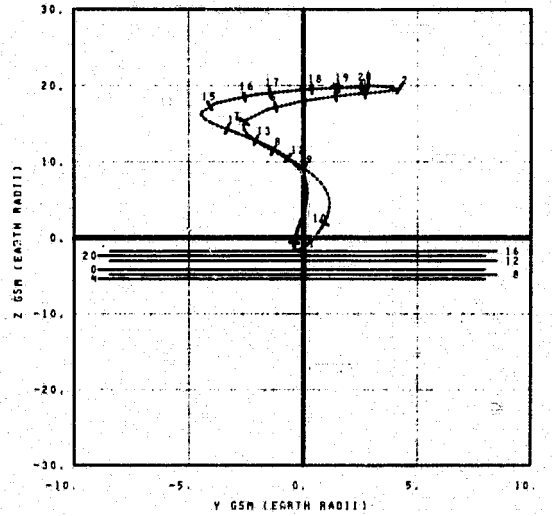
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 13/ 7.00H TO 1976/ 15/ 8.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 13/ 7.50 H	R= 20.3 R_E	11 - 1976/ 14/ 10.90 H	R= 2.4 R_E
2 - 1976/ 13/ 10.50 H	R= 20.2 R_E	12 - 1976/ 14/ 16.33 H	R= 11.6 R_E
3 - 1976/ 13/ 14.00 H	R= 19.6 R_E	13 - 1976/ 14/ 18.50 H	R= 13.7 R_E
4 - 1976/ 13/ 19.50 H	R= 19.2 R_E	14 - 1976/ 14/ 20.33 H	R= 15.2 R_E
5 - 1976/ 13/ 17.00 H	R= 18.7 R_E	15 - 1976/ 15/ 1.17 H	R= 18.0 R_E
6 - 1976/ 13/ 18.50 H	R= 18.0 R_E	16 - 1976/ 15/ 3.17 H	R= 18.8 R_E
7 - 1976/ 13/ 21.33 H	R= 16.5 R_E	17 - 1976/ 15/ 4.17 H	R= 19.2 R_E
8 - 1976/ 14/ 1.67 H	R= 13.3 R_E	18 - 1976/ 15/ 5.67 H	R= 19.6 R_E
9 - 1976/ 14/ 3.67 H	R= 11.3 R_E	19 - 1976/ 15/ 6.67 H	R= 19.8 R_E
10 - 1976/ 14/ 7.92 H	R= 5.2 R_E	20 - 1976/ 15/ 7.67 H	R= 20.0 R_E

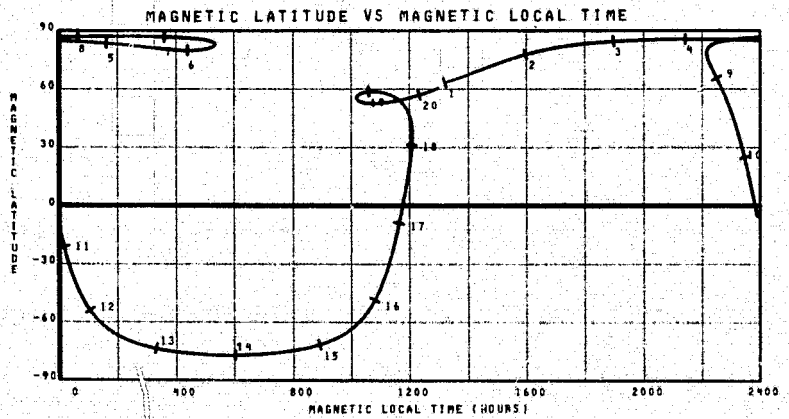
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EART. RADII

TIME INTERVAL OF PLOT 1976/ 13/ 7.00H TO 1976/ 15/ 8.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

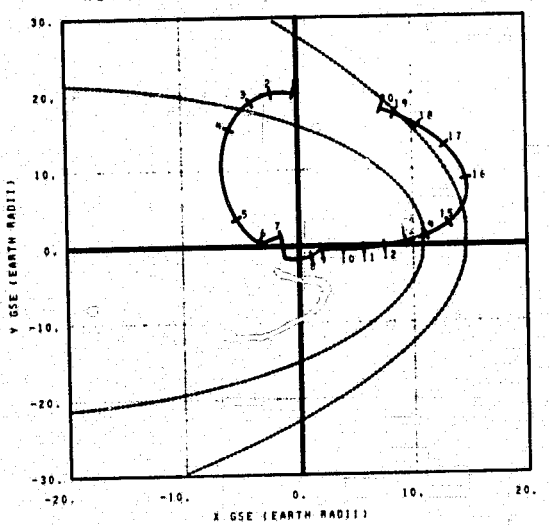
1 - 1976/ 13/ 7.50 H	R= 20.3 R_E	8 - 1976/ 14/ 3.50 H	R= 11.5 R_E	15 - 1976/ 14/ 10.83 H	R= 1.0 R_E
2 - 1976/ 13/ 12.50 H	R= 19.9 R_E	9 - 1976/ 14/ 4.83 H	R= 7.1 R_E	16 - 1976/ 14/ 10.27 H	R= 2.1 R_E
3 - 1976/ 13/ 15.70 H	R= 19.3 R_E	10 - 1976/ 14/ 6.83 H	R= 3.9 R_E	17 - 1976/ 14/ 10.88 H	R= 3.4 R_E
4 - 1976/ 13/ 16.40 H	R= 19.0 R_E	11 - 1976/ 14/ 9.50 H	R= 2.0 R_E	18 - 1976/ 14/ 12.05 H	R= 7.0 R_E
5 - 1976/ 13/ 17.00 H	R= 18.3 R_E	12 - 1976/ 14/ 9.75 H	R= 1.7 R_E	19 - 1976/ 14/ 13.33 H	R= 14.9 R_E
6 - 1976/ 13/ 21.83 H	R= 16.2 R_E	13 - 1976/ 14/ 9.90 H	R= 1.7 R_E	20 - 1976/ 15/ 6.17 H	R= 19.7 R_E
7 - 1976/ 14/ 2.83 H	R= 12.2 R_E	14 - 1976/ 14/ 9.97 H	R= 1.7 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 13 / 7.00H TO1976/ 15 / 8.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 15/ 0.17H	LAT= 81.4	11 - 1976/ 16/ 19.25H	LAT= 37.5
2 - 1976/ 15/ 13.17H	LAT= 70.6	12 - 1976/ 16/ 16.33H	LAT= 48.7
3 - 1976/ 15/ 18.17H	LAT= 79.2	13 - 1976/ 16/ 17.67H	LAT= 57.0
4 - 1976/ 16/ 0.67H	LAT= 66.0	14 - 1976/ 16/ 19.17H	LAT= 63.2
5 - 1976/ 16/ 10.92H	LAT= 31.5	15 - 1976/ 16/ 21.33H	LAT= 69.2
6 - 1976/ 16/ 12.08H	LAT= 0.7	16 - 1976/ 17/ 2.33H	LAT= 77.9
7 - 1976/ 16/ 12.67H	LAT= -40.9	17 - 1976/ 17/ 5.08H	LAT= 80.1
8 - 1976/ 16/ 13.08H	LAT= -76.1	18 - 1976/ 17/ 6.50H	LAT= 81.6
9 - 1976/ 16/ 13.[illegible]H	LAT= -32.8	19 - 1976/ 17/ 7.50H	LAT= 81.6
10 - 1976/ 16/ 14.33H	LAT= 19.1	20 - 1976/ 17/ 8.00H	LAT= 81.6

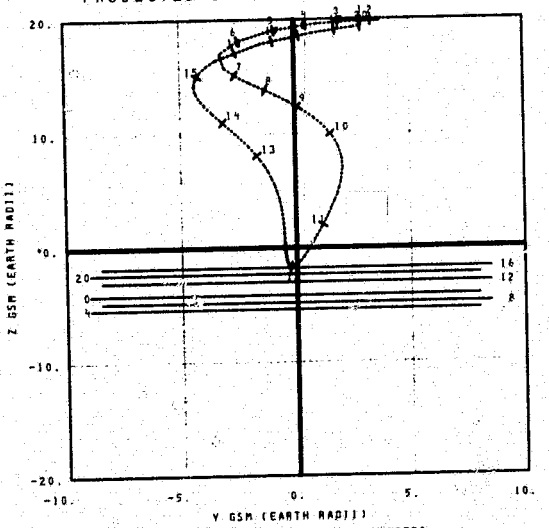
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 15/ 0.00H TO 1976/ 17/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 15/ 0.17H	R= 20.0RE	11 - 1976/ 16/ 11.08H	R= 5.3RE
2 - 1976/ 15/ 12.67H	R= 20.2RE	12 - 1976/ 16/ 13.08H	R= 1.7RE
3 - 1976/ 15/ 14.67H	R= 20.1RE	13 - 1976/ 16/ 17.92H	R= 9.7RE
4 - 1976/ 15/ 16.17H	R= 19.8RE	14 - 1976/ 16/ 20.33H	R= 12.9RE
5 - 1976/ 15/ 17.67H	R= 19.5RE	15 - 1976/ 17/ 0.83H	R= 16.1RE
6 - 1976/ 15/ 19.67H	R= 18.9RE	16 - 1976/ 17/ 3.50H	R= 17.6RE
7 - 1976/ 16/ 0.67H	R= 16.5RE	17 - 1976/ 17/ 5.00H	R= 18.3RE
8 - 1976/ 16/ 2.50H	R= 15.2RE	18 - 1976/ 17/ 6.00H	R= 18.7RE
9 - 1976/ 16/ 4.17H	R= 13.9RE	19 - 1976/ 17/ 7.50H	R= 19.2RE
10 - 1976/ 16/ 6.17H	R= 12.1RE	20 - 1976/ 17/ 9.00H	R= 19.6RE

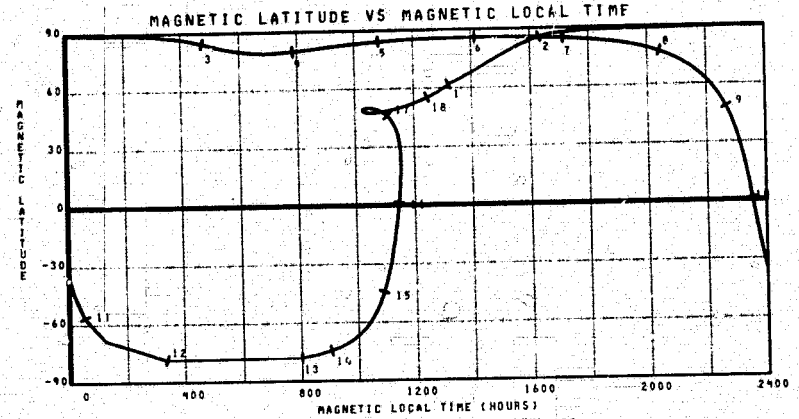
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 15/ 0.00H TO 1976/ 17/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

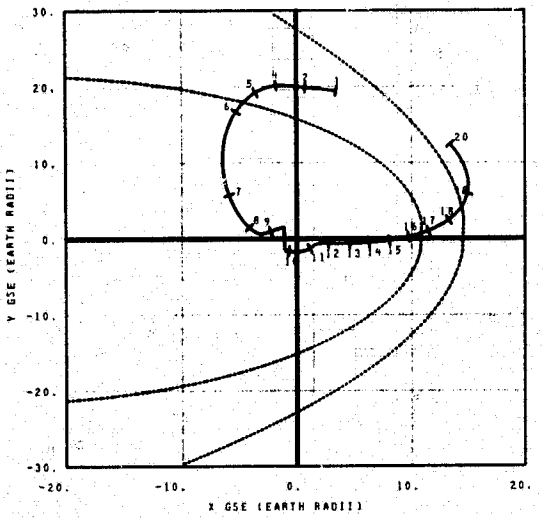
1 - 1976/ 15/ 0.17H	R= 20.0RE	8 - 1976/ 16/ 7.33H	R= 10.8RE	15 - 1976/ 16/ 13.45H	R= 2.1RE
2 - 1976/ 15/ 15.17H	R= 20.0RE	9 - 1976/ 16/ 10.67H	R= 6.1RE	16 - 1976/ 16/ 14.17H	R= 3.5RE
3 - 1976/ 15/ 18.67H	R= 19.2RE	10 - 1976/ 16/ 12.33H	R= 2.8RE	17 - 1976/ 16/ 17.67H	R= 9.4RE
4 - 1976/ 16/ 0.67H	R= 16.5RE	11 - 1976/ 16/ 12.92H	R= 1.0RE	18 - 1976/ 17/ 7.00H	R= 19.0RE
5 - 1976/ 16/ 3.50H	R= 14.5RE	12 - 1976/ 16/ 13.00H	R= 1.7RE		
6 - 1976/ 16/ 4.67H	R= 13.5RE	13 - 1976/ 16/ 13.17H	R= 1.7RE		
7 - 1976/ 16/ 5.50H	R= 12.7RE	14 - 1976/ 16/ 13.20H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 15 / 0.00H TO1976/ 17 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 17/ 9.50 H	LAT=	81.7	11 - 1976/ 18/ 16.32 H	LAT=	-74.3
2 - 1976/ 17/ 10.50 H	LAT=	81.6	12 - 1976/ 18/ 17.05 H	LAT=	-1.3
3 - 1976/ 17/ 11.00 H	LAT=	81.5	13 - 1976/ 18/ 17.92 H	LAT=	28.1
4 - 1976/ 17/ 15.50 H	LAT=	79.3	14 - 1976/ 18/ 18.83 H	LAT=	92.0
5 - 1976/ 17/ 20.50 H	LAT=	75.1	15 - 1976/ 18/ 19.92 H	LAT=	91.9
6 - 1976/ 18/ 2.00 H	LAT=	68.8	16 - 1976/ 18/ 21.17 H	LAT=	90.3
7 - 1976/ 18/ 3.50 H	LAT=	61.0	17 - 1976/ 18/ 22.67 H	LAT=	89.0
8 - 1976/ 18/ 14.75 H	LAT=	19.5	18 - 1976/ 19/ 0.67 H	LAT=	89.9
9 - 1976/ 18/ 15.67 H	LAT=	-22.3	19 - 1976/ 19/ 4.00 H	LAT=	75.5
10 - 1976/ 18/ 16.10 H	LAT=	-66.9	20 - 1976/ 19/ 8.17 H	LAT=	89.0

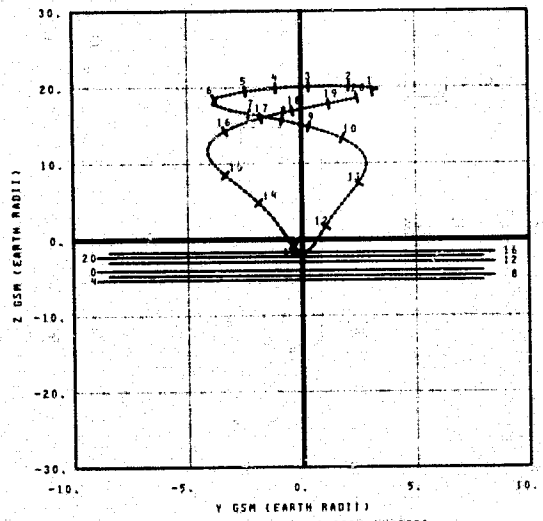
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 17/ 9.00H TO 1976/ 19/10.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 17/ 9.50 H	R= 19.7 R_E	11 - 1976/ 18/ 11.17 H	R= 10.0 R_E
2 - 1976/ 17/ 10.00 H	R= 20.3 R_E	12 - 1976/ 18/ 14.50 H	R= 9.9 R_E
3 - 1976/ 17/ 11.00 H	R= 20.2 R_E	13 - 1976/ 18/ 16.00 H	R= 2.3 R_E
4 - 1976/ 17/ 15.50 H	R= 20.1 R_E	14 - 1976/ 18/ 19.33 H	R= 7.1 R_E
5 - 1976/ 17/ 19.00 H	R= 19.9 R_E	15 - 1976/ 18/ 21.75 H	R= 10.5 R_E
6 - 1976/ 17/ 21.50 H	R= 19.3 R_E	16 - 1976/ 19/ 2.83 H	R= 15.2 R_E
7 - 1976/ 18/ 2.00 H	R= 17.5 R_E	17 - 1976/ 19/ 4.67 H	R= 16.5 R_E
8 - 1976/ 18/ 3.50 H	R= 16.7 R_E	18 - 1976/ 19/ 6.00 H	R= 17.2 R_E
9 - 1976/ 18/ 4.67 H	R= 16.0 R_E	19 - 1976/ 19/ 7.67 H	R= 18.1 R_E
10 - 1976/ 18/ 6.33 H	R= 14.8 R_E	20 - 1976/ 19/ 9.67 H	R= 18.9 R_E

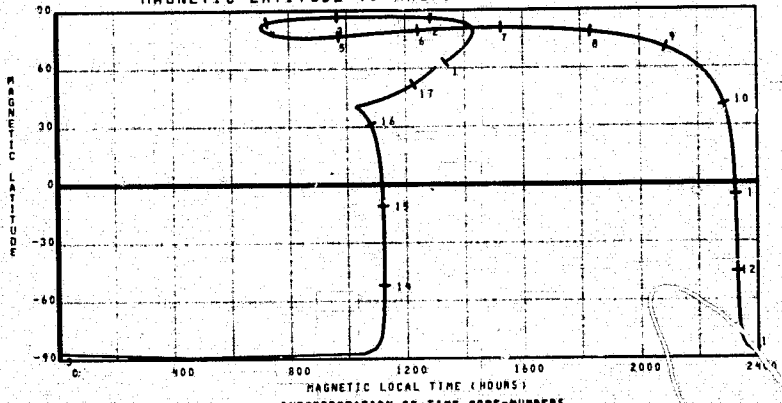
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 17/ 9.00H TO 1976/ 19/10.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

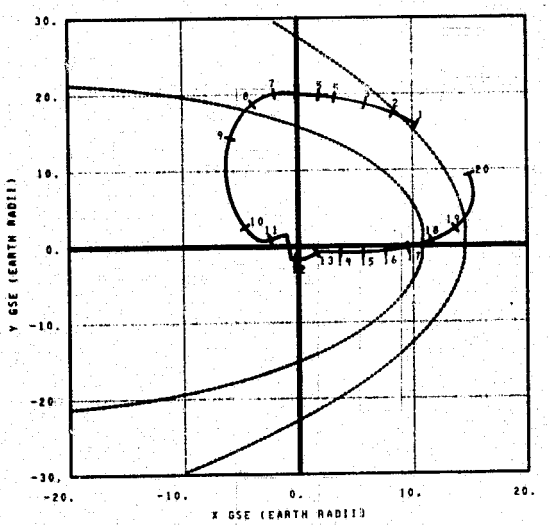
1 - 1976/ 17/ 9.50 H	R= 19.7 R_E	9 - 1976/ 18/ 8.00 H	R= 13.4 R_E	15 - 1976/ 18/ 17.0 H	R= 2.9 R_E
2 - 1976/ 17/ 10.00 H	R= 20.3 R_E	10 - 1976/ 18/ 10.17 H	R= 11.2 R_E	16 - 1976/ 18/ 19.17 H	R= 6.9 R_E
3 - 1976/ 17/ 11.00 H	R= 20.2 R_E	11 - 1976/ 18/ 13.92 H	R= 6.0 R_E	17 - 1976/ 19/ 7.17 H	R= 17.0 R_E
4 - 1976/ 17/ 15.50 H	R= 20.0 R_E	12 - 1976/ 18/ 15.50 H	R= 2.1 R_E		
5 - 1976/ 18/ 2.00 H	R= 17.5 R_E	13 - 1976/ 18/ 16.92 H	R= 1.9 R_E		
6 - 1976/ 18/ 4.67 H	R= 16.0 R_E	14 - 1976/ 18/ 16.30 H	R= 1.9 R_E		
7 - 1976/ 18/ 6.33 H	R= 14.8 R_E	14 - 1976/ 18/ 16.50 H	R= 1.9 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 17 / 9.00H TO1976/ 19 /10.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 19/ 10.17H	LAT= 81.2	11 - 1976/ 20/ 10.83H	LAT= -10.5
2 - 1976/ 19/ 11.17H	LAT= 81.5	12 - 1976/ 20/ 19.42H	LAT= -78.5
3 - 1976/ 19/ 12.17H	LAT= 81.7	13 - 1976/ 20/ 19.67H	LAT= -58.2
4 - 1976/ 19/ 13.17H	LAT= 81.7	14 - 1976/ 20/ 20.67H	LAT= 15.8
5 - 1976/ 19/ 13.67H	LAT= 81.7	15 - 1976/ 20/ 21.67H	LAT= 37.2
6 - 1976/ 19/ 14.67H	LAT= 81.4	16 - 1976/ 20/ 22.83H	LAT= 49.2
7 - 1976/ 19/ 19.67H	LAT= 78.7	17 - 1976/ 21/ 0.25H	LAT= 57.7
8 - 1976/ 20/ 1.17H	LAT= 73.7	18 - 1976/ 21/ 2.00H	LAT= 64.4
9 - 1976/ 20/ 8.67H	LAT= 63.5	19 - 1976/ 21/ 4.33H	LAT= 70.4
10 - 1976/ 20/ 17.50H	LAT= 23.5	20 - 1976/ 21/ 10.00H	LAT= 78.8

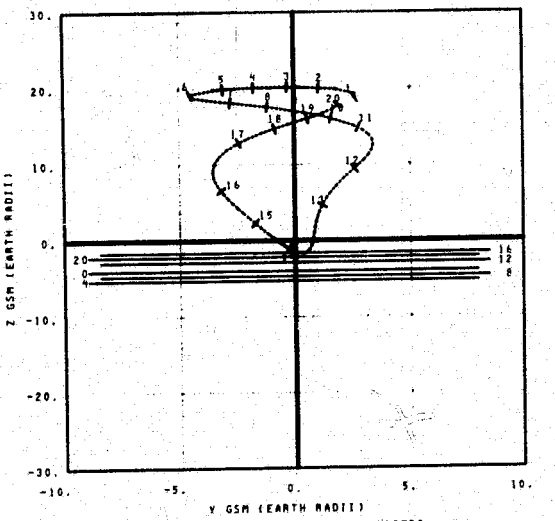
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 19/10.00H TO 1976/ 21/11.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 19/ 10.17H	R= 19.9RE	11 - 1976/ 20/ 7.67H	R= 14.1RE
2 - 1976/ 19/ 11.17H	R= 20.1RE	12 - 1976/ 20/ 13.00H	R= 11.5RE
3 - 1976/ 19/ 12.17H	R= 20.2RE	13 - 1976/ 20/ 14.33H	R= 7.3RE
4 - 1976/ 19/ 13.17H	R= 20.3RE	14 - 1976/ 20/ 19.97H	R= 2.2RE
5 - 1976/ 19/ 13.67H	R= 20.3RE	15 - 1976/ 20/ 21.42H	R= 5.2RE
6 - 1976/ 19/ 14.67H	R= 20.2RE	16 - 1976/ 20/ 23.75H	R= 8.9RE
7 - 1976/ 19/ 19.67H	R= 19.9RE	17 - 1976/ 21/ 0.33H	R= 13.9RE
8 - 1976/ 20/ 1.17H	R= 18.8RE	18 - 1976/ 21/ 2.17H	R= 15.3RE
9 - 1976/ 20/ 8.67H	R= 17.8RE	19 - 1976/ 21/ 4.17H	R= 16.4RE
10 - 1976/ 20/ 8.17H	R= 17.8RE	20 - 1976/ 21/ 11.00H	R= 18.1RE

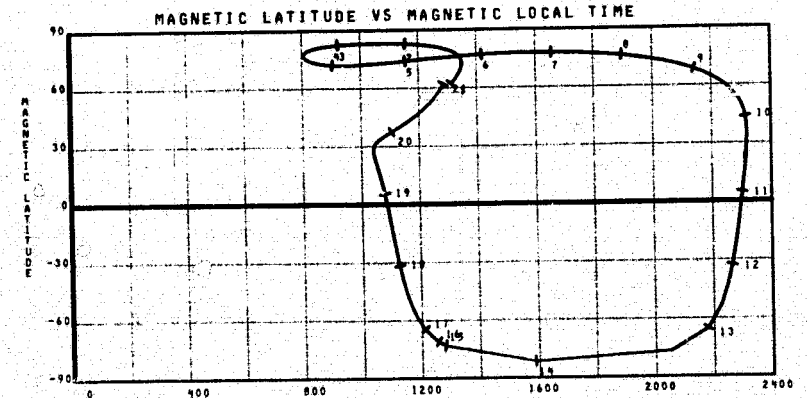
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 19/10.00H TO 1976/ 21/11.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

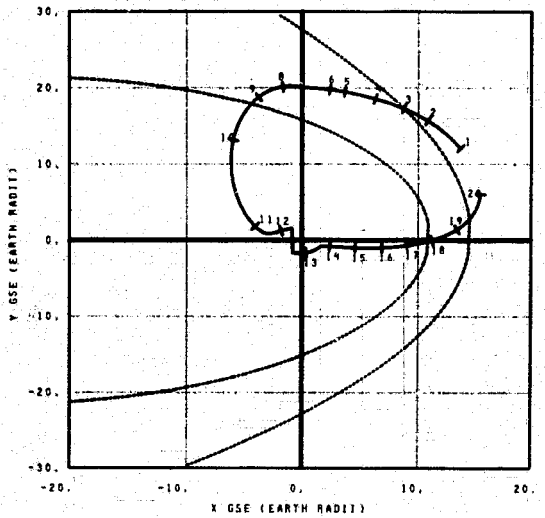
1 - 1976/ 19/ 10.17H	R= 19.9RE	8 - 1976/ 20/ 10.00H	R= 19.4RE
2 - 1976/ 19/ 16.17H	R= 20.2RE	9 - 1976/ 20/ 12.50H	R= 18.8RE
3 - 1976/ 19/ 17.67H	R= 20.3RE	10 - 1976/ 20/ 16.83H	R= 4.5RE
4 - 1976/ 20/ 0.17H	R= 19.5RE	11 - 1976/ 20/ 18.67H	R= 3.0RE
5 - 1976/ 20/ 4.17H	R= 18.0RE	12 - 1976/ 20/ 19.17H	R= 2.0RE
6 - 1976/ 20/ 6.67H	R= 16.7RE	13 - 1976/ 20/ 19.42H	R= 1.7RE
7 - 1976/ 20/ 8.33H	R= 15.7RE	14 - 1976/ 20/ 19.50H	R= 1.7RE
		15 - 1976/ 20/ 19.67H	R= 1.6RE
		16 - 1976/ 20/ 19.68H	R= 1.8RE
		17 - 1976/ 20/ 19.73H	R= 1.8RE
		18 - 1976/ 20/ 20.07H	R= 2.4RE
		19 - 1976/ 20/ 21.00H	R= 4.4RE
		20 - 1976/ 21/ 4.00H	R= 13.6RE
		21 - 1976/ 21/ 11.00H	R= 18.1RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 19 /10.00H TO19767/ 21 /11.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 21/ 11.50 H	LAT= 80.0	11 - 1976/ 22/ 21.17 H	LAT= 15.3
2 - 1976/ 21/ 13.50 H	LAT= 81.2	12 - 1976/ 22/ 22.25 H	LAT= -33.3
3 - 1976/ 21/ 14.50 H	LAT= 81.5	13 - 1976/ 22/ 22.72 H	LAT= -80.7
4 - 1976/ 21/ 15.50 H	LAT= 81.7	14 - 1976/ 22/ 23.35 H	LAT= -10.2
5 - 1976/ 21/ 16.50 H	LAT= 81.7	15 - 1976/ 23/ 0.42 H	LAT= 29.3
6 - 1976/ 21/ 17.00 H	LAT= 81.6	16 - 1976/ 23/ 1.67 H	LAT= 45.9
7 - 1976/ 21/ 18.00 H	LAT= 81.4	17 - 1976/ 23/ 3.00 H	LAT= 59.7
8 - 1976/ 21/ 22.50 H	LAT= 79.0	18 - 1976/ 23/ 4.83 H	LAT= 63.1
9 - 1976/ 22/ 4.50 H	LAT= 73.6	19 - 1976/ 23/ 7.17 H	LAT= 69.5
10 - 1976/ 22/ 13.17 H	LAT= 61.2	20 - 1976/ 23/ 11.50 H	LAT= 76.0

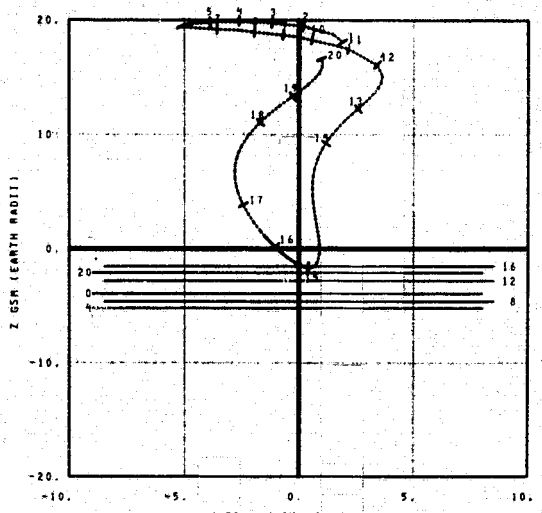
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 21/11.00H TO 1976/ 23/12.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 21/ 11.50 H	R= 18.3 R_E	11 - 1976/ 22/ 7.00 H	R= 18.2 R_E
2 - 1976/ 21/ 15.00 H	R= 19.5 R_E	12 - 1976/ 22/ 9.00 H	R= 17.2 R_E
3 - 1976/ 21/ 16.50 H	R= 19.0 R_E	13 - 1976/ 22/ 13.03 H	R= 13.9 R_E
4 - 1976/ 21/ 18.00 H	R= 20.1 R_E	14 - 1976/ 22/ 16.67 H	R= 11.2 R_E
5 - 1976/ 21/ 19.50 H	R= 20.2 R_E	15 - 1976/ 22/ 22.77 H	R= 1.7 R_E
6 - 1976/ 21/ 23.00 H	R= 20.2 R_E	16 - 1976/ 22/ 23.73 H	R= 3.3 R_E
7 - 1976/ 22/ 2.00 H	R= 19.8 R_E	17 - 1976/ 23/ 1.42 H	R= 6.6 R_E
8 - 1976/ 22/ 3.50 H	R= 19.4 R_E	18 - 1976/ 23/ 5.03 H	R= 12.3 R_E
9 - 1976/ 22/ 4.50 H	R= 19.1 R_E	19 - 1976/ 23/ 7.03 H	R= 15.1 R_E
10 - 1976/ 22/ 5.50 H	R= 18.8 R_E	20 - 1976/ 23/ 12.00 H	R= 17.6 R_E

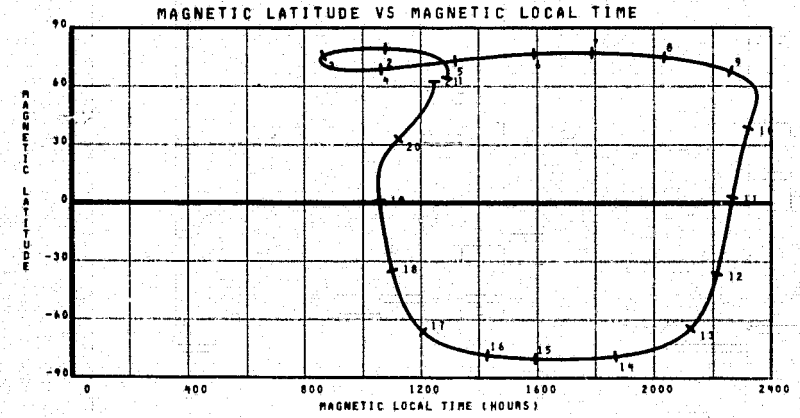
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 21/11.00H TO 1976/ 23/12.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

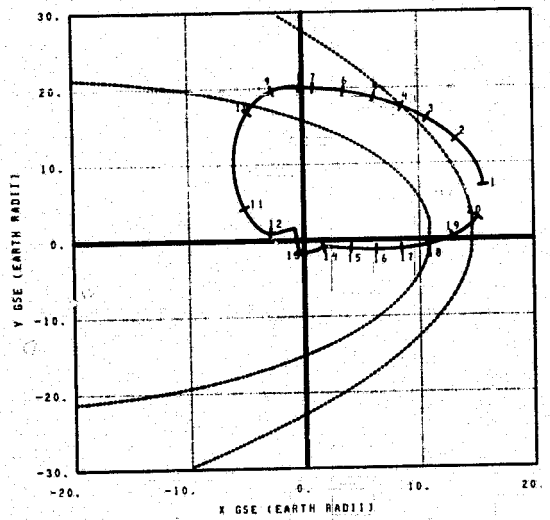
1 - 1976/ 21/ 11.50 H	R= 18.3 R_E	8 - 1976/ 22/ 12.50 H	R= 15.6 R_E	15 - 1976/ 22/ 22.07 H	R= 1.7 R_E
2 - 1976/ 21/ 14.50 H	R= 19.8 R_E	9 - 1976/ 22/ 15.50 H	R= 12.6 R_E	16 - 1976/ 22/ 22.90 H	R= 1.8 R_E
3 - 1976/ 21/ 19.50 H	R= 20.2 R_E	10 - 1976/ 22/ 21.00 H	R= 4.8 R_E	17 - 1976/ 22/ 23.02 H	R= 1.9 R_E
4 - 1976/ 22/ 1.00 H	R= 19.6 R_E	11 - 1976/ 22/ 22.08 H	R= 2.6 R_E	18 - 1976/ 22/ 23.38 H	R= 2.4 R_E
5 - 1976/ 22/ 6.50 H	R= 18.5 R_E	12 - 1976/ 22/ 22.50 H	R= 1.8 R_E	19 - 1976/ 23/ 0.80 H	R= 4.9 R_E
6 - 1976/ 22/ 9.00 H	R= 17.2 R_E	13 - 1976/ 22/ 22.76 H	R= 1.7 R_E	20 - 1976/ 23/ 5.33 H	R= 11.8 R_E
7 - 1976/ 22/ 10.96 H	R= 14.4 R_E	14 - 1976/ 22/ 22.82 H	R= 1.7 R_E	21 - 1976/ 23/ 12.00 H	R= 17.0 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 21 /11.00H TO1976/ 23 /12.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 23/ 12.17H	LAT= 77.6	11 - 1976/ 24/ 23.17H	LAT= 93.2
2 - 1976/ 23/ 15.67H	LAT= 80.7	12 - 1976/ 25/ 1.00H	LAT= -7.5
3 - 1976/ 23/ 17.17H	LAT= 81.9	13 - 1976/ 25/ 1.83H	LAT= -75.3
4 - 1976/ 23/ 18.17H	LAT= 81.6	14 - 1976/ 25/ 2.18H	LAT= -98.3
5 - 1976/ 23/ 19.17H	LAT= 81.7	15 - 1976/ 25/ 3.33H	LAT= 22.3
6 - 1976/ 23/ 20.17H	LAT= 81.7	16 - 1976/ 25/ 4.50H	LAT= 81.9
7 - 1976/ 23/ 21.17H	LAT= 81.9	17 - 1976/ 25/ 5.92H	LAT= 53.9
8 - 1976/ 23/ 22.17H	LAT= 81.1	18 - 1976/ 25/ 7.67H	LAT= 61.6
9 - 1976/ 24/ 9.67H	LAT= 76.7	19 - 1976/ 25/ 9.67H	LAT= 67.7
10 - 1976/ 24/ 11.67H	LAT= 69.0	20 - 1976/ 25/ 12.67H	LAT= 73.8

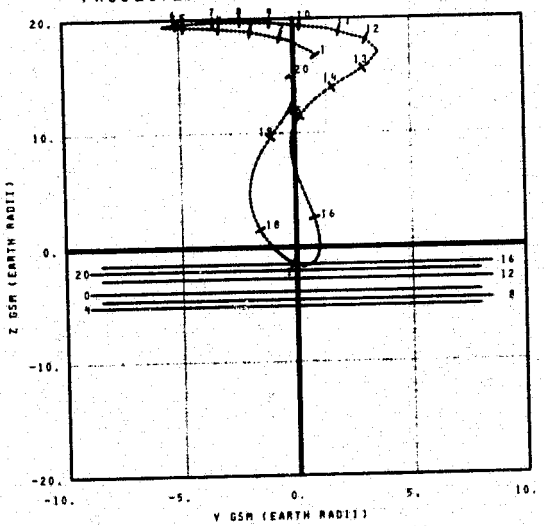
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 23/12.00H TO 1976/ 25/13.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 23/ 12.17H	R= 17.1RE	11 - 1976/ 24/ 7.17H	R= 19.3RE
2 - 1976/ 23/ 15.17H	R= 18.5RE	12 - 1976/ 24/ 8.67H	R= 18.6RE
3 - 1976/ 23/ 16.67H	R= 19.0RE	13 - 1976/ 24/ 13.17H	R= 16.7RE
4 - 1976/ 23/ 18.17H	R= 19.5RE	14 - 1976/ 24/ 15.50H	R= 13.2RE
5 - 1976/ 23/ 20.17H	R= 19.9RE	15 - 1976/ 24/ 18.17H	R= 12.9RE
6 - 1976/ 24/ 0.67H	R= 20.3RE	16 - 1976/ 24/ 23.00H	R= 9.2RE
7 - 1976/ 24/ 2.67H	R= 20.2RE	17 - 1976/ 25/ 2.27H	R= 2.0RE
8 - 1976/ 24/ 3.67H	R= 20.0RE	18 - 1976/ 25/ 3.50H	R= 4.5RE
9 - 1976/ 24/ 4.67H	R= 19.9RE	19 - 1976/ 25/ 7.03H	R= 11.8RE
10 - 1976/ 24/ 5.67H	R= 19.7RE	20 - 1976/ 25/ 13.00H	R= 15.6RE

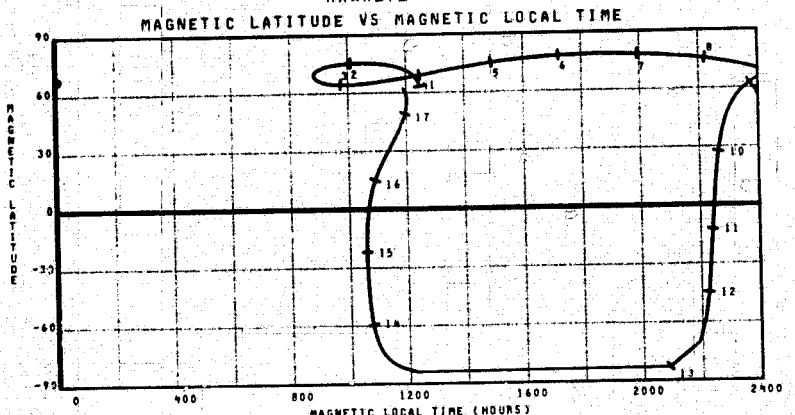
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 23/12.00H TO 1976/ 25/13.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

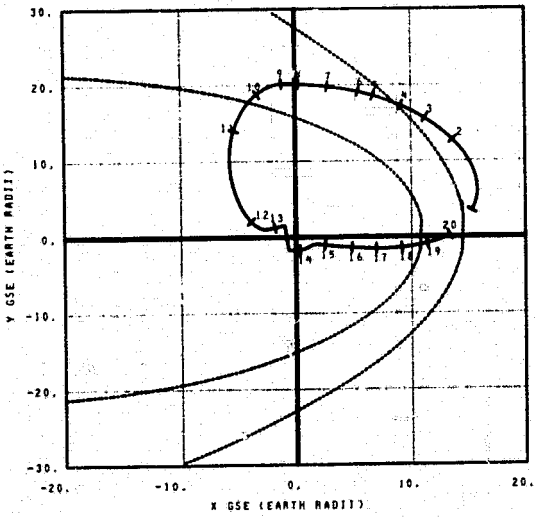
1 - 1976/ 23/ 12.17H	R= 17.1RE	8 - 1976/ 24/ 19.33H	R= 19.3RE	15 - 1976/ 25/ 3.00H	R= 3.9RE
2 - 1976/ 23/ 17.17H	R= 19.2RE	9 - 1976/ 24/ 22.50H	R= 7.6RE	16 - 1976/ 25/ 5.00H	R= 7.3RE
3 - 1976/ 24/ 1.17H	R= 20.3RE	10 - 1976/ 25/ 1.00H	R= 3.2RE	17 - 1976/ 25/ 10.33H	R= 13.9RE
4 - 1976/ 24/ 4.17H	R= 19.6RE	11 - 1976/ 25/ 1.50H	R= 2.0RE		
5 - 1976/ 24/ 9.17H	R= 10.6RE	12 - 1976/ 25/ 1.83H	R= 1.7RE		
6 - 1976/ 24/ 11.17H	R= 17.0RE	13 - 1976/ 25/ 2.00H	R= 1.7RE		
7 - 1976/ 24/ 13.17H	R= 16.7RE	14 - 1976/ 25/ 2.50H	R= 2.2RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 23 /12.00H TO1976/ 25 /13.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 25/ 13.17H	LAT= 79.6	11 - 1976/ 26/ 18.83H	LAT= 62.8
2 - 1976/ 25/ 19.00H	LAT= 80.7	12 - 1976/ 27/ 3.50H	LAT= 19.8
3 - 1976/ 25/ 20.50H	LAT= 81.4	13 - 1976/ 27/ 4.67H	LAT= -31.1
4 - 1976/ 25/ 21.50H	LAT= 81.7	14 - 1976/ 27/ 5.17H	LAT= -80.2
5 - 1976/ 25/ 22.50H	LAT= 81.7	15 - 1976/ 27/ 5.88H	LAT= -74.7
6 - 1976/ 25/ 23.00H	LAT= 81.7	16 - 1976/ 27/ 7.00H	LAT= 31.7
7 - 1976/ 25/ 24.00H	LAT= 81.6	17 - 1976/ 27/ 8.17H	LAT= 66.2
8 - 1976/ 26/ 1.00H	LAT= 81.3	18 - 1976/ 27/ 9.67H	LAT= 56.2
9 - 1976/ 26/ 4.50H	LAT= 79.9	19 - 1976/ 27/ 11.50H	LAT= 43.4
10 - 1976/ 26/ 11.00H	LAT= 73.7	20 - 1976/ 27/ 13.50H	LAT= 69.1

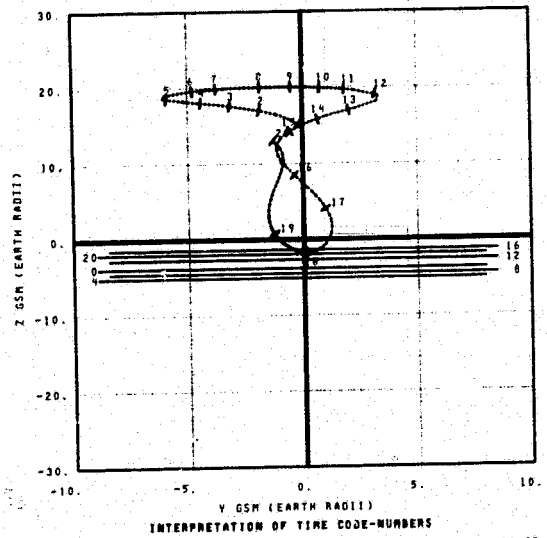
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 25/13.00H TO 1976/ 27/14.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 25/ 13.17H	R= 15.7RE	11 - 1976/ 26/ 7.50H	R= 20.0RE
2 - 1976/ 25/ 16.00H	R= 17.9RE	12 - 1976/ 26/ 9.50H	R= 19.5RE
3 - 1976/ 25/ 17.50H	R= 18.1RE	13 - 1976/ 26/ 14.50H	R= 17.7RE
4 - 1976/ 25/ 19.00H	R= 18.7RE	14 - 1976/ 26/ 16.50H	R= 16.4RE
5 - 1976/ 25/ 21.50H	R= 19.5RE	15 - 1976/ 26/ 18.50H	R= 15.3RE
6 - 1976/ 26/ 2.00H	R= 20.2RE	16 - 1976/ 26/ 23.83H	R= 10.3RE
7 - 1976/ 26/ 3.00H	R= 20.3RE	17 - 1976/ 27/ 2.50H	R= 6.5RE
8 - 1976/ 26/ 4.50H	R= 20.3RE	18 - 1976/ 27/ 5.17H	R= 1.7RE
9 - 1976/ 26/ 5.50H	R= 20.2RE	19 - 1976/ 27/ 6.33H	R= 3.7RE
10 - 1976/ 26/ 6.50H	R= 20.1RE	20 - 1976/ 27/ 14.00H	R= 13.9RE

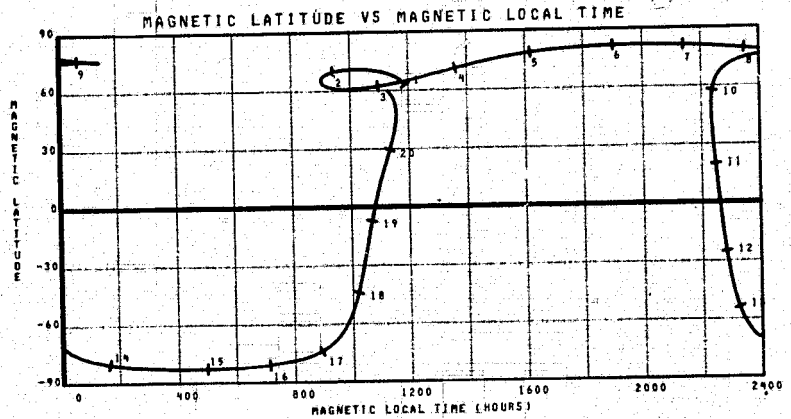
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 25/13.00H TO 1976/ 27/14.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

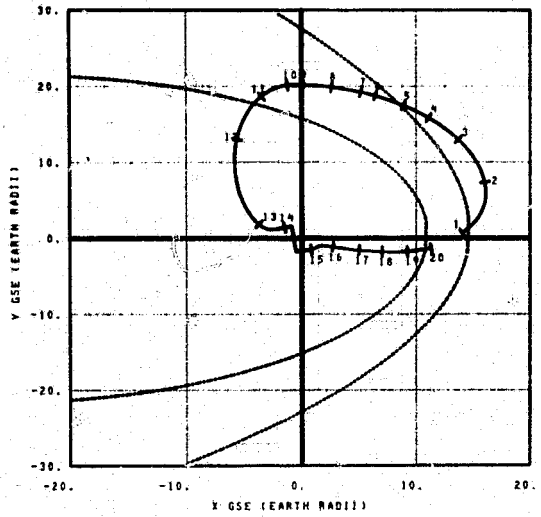
1 - 1976/ 25/ 13.17H	R= 15.7RE	8 - 1976/ 26/ 16.83H	R= 16.4RE	15 - 1976/ 27/ 5.33H	R= 1.8RE
2 - 1976/ 25/ 18.50H	R= 18.5RE	9 - 1976/ 26/ 23.83H	R= 10.3RE	16 - 1976/ 27/ 5.38H	R= 1.8RE
3 - 1976/ 26/ 0.00H	R= 20.3RE	10 - 1976/ 27/ 3.17H	R= 5.3RE	17 - 1976/ 27/ 5.95H	R= 1.9RE
4 - 1976/ 26/ 8.50H	R= 19.8RE	11 - 1976/ 27/ 4.42H	R= 2.8RE	18 - 1976/ 27/ 5.77H	R= 2.5RE
5 - 1976/ 26/ 11.50H	R= 19.0RE	12 - 1976/ 27/ 4.92H	R= 1.9RE	19 - 1976/ 27/ 6.58H	R= 4.2RE
6 - 1976/ 26/ 13.50H	R= 18.2RE	13 - 1976/ 27/ 5.12H	R= 1.7RE	20 - 1976/ 27/ 9.00H	R= 8.9RE
7 - 1976/ 26/ 15.00H	R= 17.5RE	14 - 1976/ 27/ 5.30H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 25 /13.00H TO1976/ 27 /14.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 27/ 14.17H	LAT=	70.5	11 - 1976/ 28/ 14.67H	LAT=	73.3
2 - 1976/ 27/ 19.67H	LAT=	78.6	12 - 1976/ 28/ 23.17H	LAT=	60.6
3 - 1976/ 27/ 22.67H	LAT=	86.9	13 - 1976/ 29/ 7.00H	LAT=	11.1
4 - 1976/ 28/ 0.17H	LAT=	81.5	14 - 1976/ 29/ 8.00H	LAT=	-41.9
5 - 1976/ 28/ 1.17H	LAT=	81.7	15 - 1976/ 29/ 8.42H	LAT=	-77.0
6 - 1976/ 28/ 2.17H	LAT=	81.7	16 - 1976/ 29/ 9.25H	LAT=	8.6
7 - 1976/ 28/ 2.67H	LAT=	81.7	17 - 1976/ 29/ 10.33H	LAT=	33.4
8 - 1976/ 28/ 3.67H	LAT=	81.5	18 - 1976/ 29/ 11.50H	LAT=	47.0
9 - 1976/ 28/ 4.67H	LAT=	81.1	19 - 1976/ 29/ 13.00H	LAT=	56.6
10 - 1976/ 28/ 8.17H	LAT=	79.1	20 - 1976/ 29/ 14.67H	LAT=	63.3

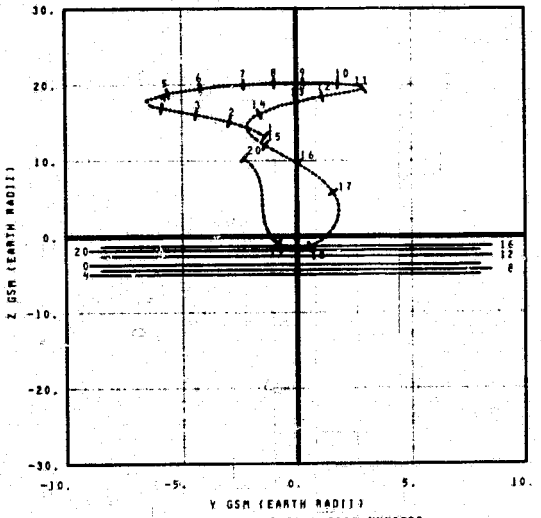
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 27/14.00H TO 1976/ 29/15.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 27/ 14.17H	R=	14.0RE	11 - 1976/ 28/ 14.67H	R=	19.0RE
2 - 1976/ 27/ 19.67H	R=	19.9RE	12 - 1976/ 28/ 15.17H	R=	18.0RE
3 - 1976/ 27/ 22.67H	R=	17.0RE	13 - 1976/ 28/ 16.67H	R=	18.2RE
4 - 1976/ 27/ 28.67H	R=	18.1RE	14 - 1976/ 28/ 19.17H	R=	17.0RE
5 - 1976/ 28/ 1.67H	R=	19.7RE	15 - 1976/ 29/ 0.17H	R=	13.3RE
6 - 1976/ 28/ 3.17H	R=	20.0RE	16 - 1976/ 29/ 2.33H	R=	11.1RE
7 - 1976/ 28/ 4.67H	R=	20.2RE	17 - 1976/ 29/ 4.75H	R=	8.0RE
8 - 1976/ 28/ 5.67H	R=	20.2RE	18 - 1976/ 29/ 6.00H	R=	2.1RE
9 - 1976/ 28/ 6.67H	R=	20.3RE	19 - 1976/ 29/ 8.05H	R=	2.2RE
10 - 1976/ 28/ 8.17H	R=	20.2RE	20 - 1976/ 29/ 15.00H	R=	11.7RE

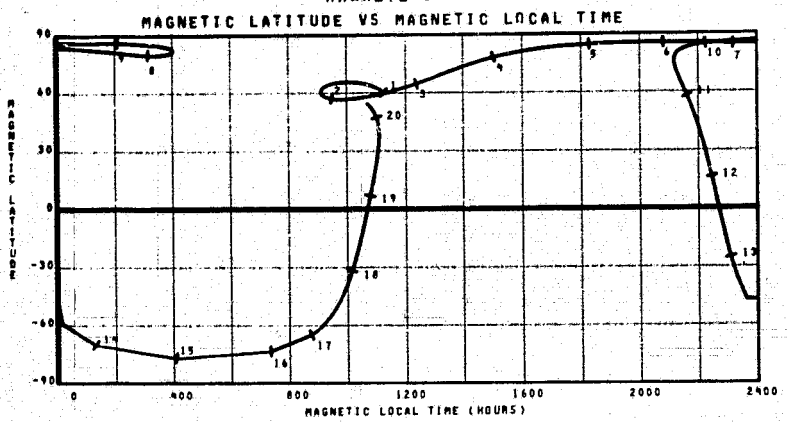
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 27/14.00H TO 1976/ 29/15.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

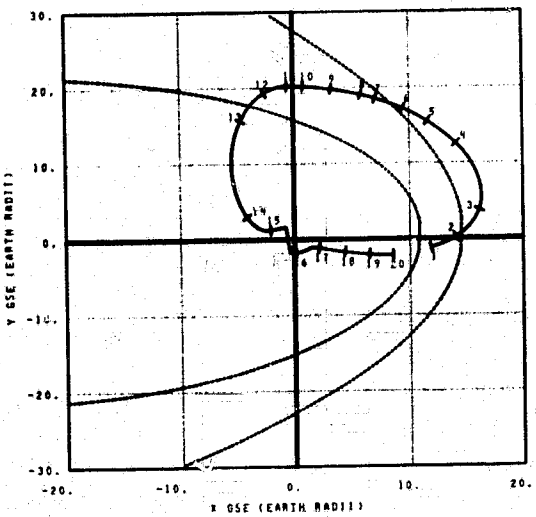
1 - 1976/ 27/ 14.17H	R=	14.0RE	8 - 1976/ 28/ 20.50H	R=	14.1RE	15 - 1976/ 29/ 8.50H	R=	1.7RE
2 - 1976/ 28/ 0.17H	R=	19.9RE	9 - 1976/ 29/ 1.67H	R=	11.9RE	16 - 1976/ 29/ 8.58H	R=	1.8RE
3 - 1976/ 28/ 7.17H	R=	20.2RE	10 - 1976/ 29/ 2.03H	R=	10.6RE	17 - 1976/ 29/ 8.67H	R=	1.9RE
4 - 1976/ 28/ 11.67H	R=	19.0RE	11 - 1976/ 29/ 6.00H	R=	5.9RE	18 - 1976/ 29/ 9.03H	R=	2.4RE
5 - 1976/ 28/ 14.17H	R=	19.1RE	12 - 1976/ 29/ 7.50H	R=	2.9RE	19 - 1976/ 29/ 10.00H	R=	4.0RE
6 - 1976/ 28/ 19.17H	R=	18.0RE	13 - 1976/ 29/ 8.00H	R=	1.9RE	20 - 1976/ 29/ 13.00H	R=	10.0RE
7 - 1976/ 28/ 16.17H	R=	16.9RE	14 - 1976/ 29/ 8.42H	R=	1.7RE			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 27 /14.00H TO1976/ 29 /15.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 29/ 19.17H	LAT= 64.9	11 - 1976/ 30/ 18.00H	LAT= 86.1
2 - 1976/ 29/ 17.50H	LAT= 70.7	12 - 1976/ 30/ 16.00H	LAT= 75.3
3 - 1976/ 29/ 21.00H	LAT= 76.4	13 - 1976/ 30/ 23.33H	LAT= 66.2
4 - 1976/ 30/ 2.00H	LAT= 89.9	14 - 1976/ 31/ 9.67H	LAT= 22.5
5 - 1976/ 30/ 3.50H	LAT= 81.5	15 - 1976/ 31/ 11.00H	LAT= -23.9
6 - 1976/ 30/ 4.50H	LAT= 81.7	16 - 1976/ 31/ 11.50H	LAT= -80.6
7 - 1976/ 30/ 5.50H	LAT= 81.7	17 - 1976/ 31/ 12.17H	LAT= -15.6
8 - 1976/ 30/ 6.00H	LAT= 81.7	18 - 1976/ 31/ 13.25H	LAT= 27.8
9 - 1976/ 30/ 7.00H	LAT= 81.9	19 - 1976/ 31/ 14.42H	LAT= 44.2
10 - 1976/ 30/ 8.00H	LAT= 81.1	20 - 1976/ 31/ 15.75H	LAT= 54.0

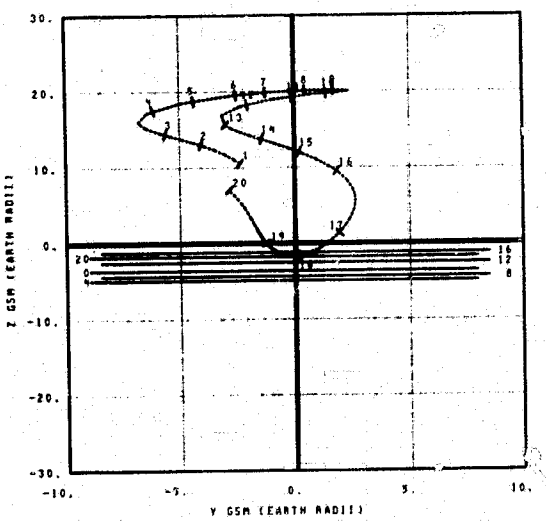
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 29/15.00H TO 1976/ 31/16.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 29/ 19.17H	R= 11.9RE	11 - 1976/ 30/ 16.00H	R= 19.5RE
2 - 1976/ 29/ 17.83H	R= 14.4RE	12 - 1976/ 30/ 18.50H	R= 18.7RE
3 - 1976/ 29/ 20.00H	R= 16.0RE	13 - 1976/ 30/ 23.00H	R= 16.4RE
4 - 1976/ 30/ 1.50H	R= 18.7RE	14 - 1976/ 31/ 1.67H	R= 14.8RE
5 - 1976/ 30/ 3.50H	R= 19.4RE	15 - 1976/ 31/ 3.50H	R= 13.2RE
6 - 1976/ 30/ 5.00H	R= 19.7RE	16 - 1976/ 31/ 5.50H	R= 11.2RE
7 - 1976/ 30/ 6.00H	R= 19.9RE	17 - 1976/ 31/ 10.00H	R= 4.6RE
8 - 1976/ 30/ 7.50H	R= 20.1RE	18 - 1976/ 31/ 11.42H	R= 1.0RE
9 - 1976/ 30/ 9.00H	R= 20.2RE	19 - 1976/ 31/ 12.47H	R= 3.0RE
10 - 1976/ 30/ 14.00H	R= 19.9RE	20 - 1976/ 31/ 16.00H	R= 9.1RE

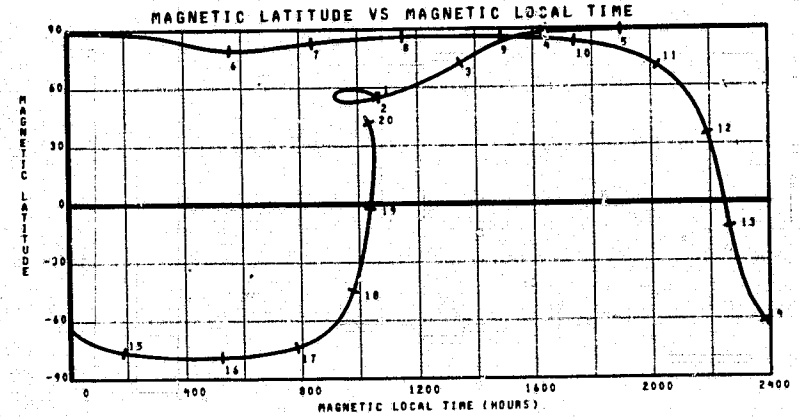
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 29/15.00H TO 1976/ 31/16.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

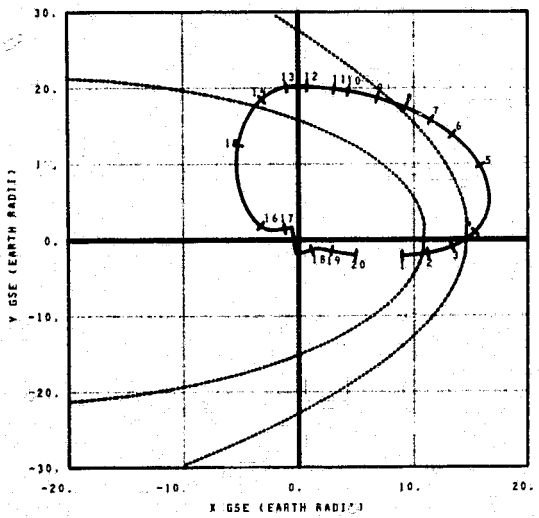
1 - 1976/ 29/ 19.17H	R= 11.9RE	11 - 1976/ 31/ 11.42H	R= 1.0RE
2 - 1976/ 30/ 4.00H	R= 19.9RE	12 - 1976/ 31/ 11.75H	R= 1.0RE
3 - 1976/ 30/ 10.50H	R= 20.1RE	13 - 1976/ 31/ 11.92H	R= 1.0RE
4 - 1976/ 30/ 15.00H	R= 19.7RE	14 - 1976/ 31/ 12.00H	R= 1.1RE
5 - 1976/ 30/ 15.50H	R= 19.6RE	15 - 1976/ 31/ 12.08H	R= 1.3RE
6 - 1976/ 30/ 21.50H	R= 17.4RE	16 - 1976/ 31/ 12.25H	R= 1.5RE
7 - 1976/ 31/ 1.67H	R= 14.8RE	17 - 1976/ 31/ 12.33H	R= 1.7RE
8 - 1976/ 31/ 3.17H	R= 13.5RE	18 - 1976/ 31/ 12.42H	R= 1.8RE
9 - 1976/ 31/ 4.00H	R= 12.6RE	19 - 1976/ 31/ 12.58H	R= 1.9RE
10 - 1976/ 31/ 7.17H	R= 9.2RE	20 - 1976/ 31/ 15.42H	R= 3.0RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 29/15.00H TO 1976/ 31/16.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 31/ 16.00H	LAT= 55.8	11 - 1976/ 32/ 10.67H	LAT= 81.9
2 - 1976/ 31/ 17.83H	LAT= 63.1	12 - 1976/ 32/ 11.67H	LAT= 81.0
3 - 1976/ 31/ 19.83H	LAT= 68.6	13 - 1976/ 32/ 15.17H	LAT= 78.8
4 - 1976/ 31/ 21.33H	LAT= 73.5	14 - 1976/ 32/ 21.67H	LAT= 72.8
5 - 1976/ 32/ 4.17H	LAT= 80.3	15 - 1976/ 33/ 6.33H	LAT= 59.1
6 - 1976/ 32/ 6.17H	LAT= 81.3	16 - 1976/ 33/ 13.50H	LAT= 7.0
7 - 1976/ 32/ 7.17H	LAT= 81.6	17 - 1976/ 33/ 14.50H	LAT= -48.9
8 - 1976/ 32/ 8.17H	LAT= 81.7	18 - 1976/ 33/ 14.92H	LAT= -69.9
9 - 1976/ 32/ 9.17H	LAT= 81.7	19 - 1976/ 33/ 15.77H	LAT= 6.7
10 - 1976/ 32/ 10.17H	LAT= 81.5	20 - 1976/ 33/ 16.83H	LAT= 34.3

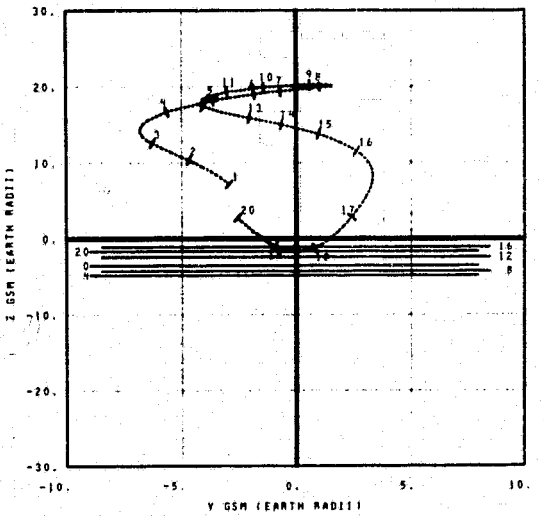
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 31/16.00H TO 1976/ 33/17.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 31/ 16.00H	R= 9.2R_E	11 - 1976/ 32/ 10.67H	R= 19.6R_E
2 - 1976/ 31/ 18.83H	R= 12.9R_E	12 - 1976/ 32/ 23.17H	R= 18.2R_E
3 - 1976/ 31/ 21.50H	R= 14.7R_E	13 - 1976/ 33/ 2.17H	R= 16.6R_E
4 - 1976/ 32/ 2.67H	R= 17.9R_E	14 - 1976/ 33/ 3.50H	R= 15.0R_E
5 - 1976/ 32/ 4.67H	R= 18.7R_E	15 - 1976/ 33/ 5.00H	R= 14.7R_E
6 - 1976/ 32/ 6.17H	R= 19.2R_E	16 - 1976/ 33/ 7.00H	R= 13.0R_E
7 - 1976/ 32/ 7.17H	R= 19.5R_E	17 - 1976/ 33/ 12.50H	R= 5.0R_E
8 - 1976/ 32/ 9.17H	R= 19.9R_E	18 - 1976/ 33/ 14.92H	R= 2.1R_E
9 - 1976/ 32/ 14.17H	R= 20.2R_E	19 - 1976/ 33/ 15.33H	R= 2.3R_E
10 - 1976/ 32/ 16.67H	R= 20.0R_E	20 - 1976/ 33/ 17.00H	R= 5.7R_E

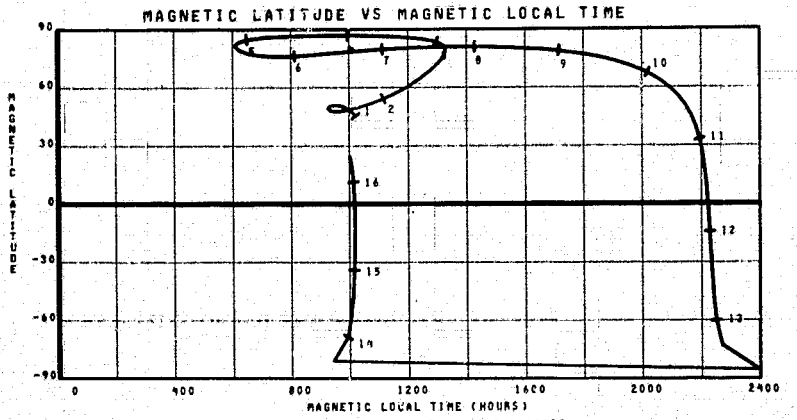
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 31/16.00H TO 1976/ 33/17.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

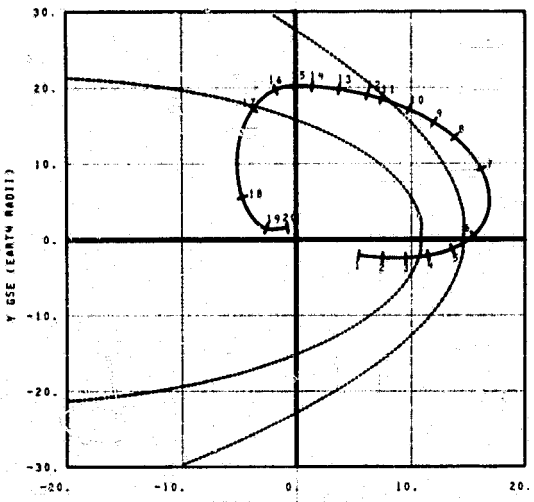
1 - 1976/ 31/ 16.00H	R= 9.2R_E	6 - 1976/ 33/ 4.33H	R= 19.9R_E	15 - 1976/ 33/ 15.33H	R= 2.2R_E
2 - 1976/ 32/ 5.67H	R= 19.1R_E	7 - 1976/ 33/ 6.83H	R= 13.1R_E	16 - 1976/ 33/ 16.25H	R= 9.2R_E
3 - 1976/ 32/ 14.17H	R= 20.2R_E	8 - 1976/ 33/ 9.58H	R= 10.3R_E		
4 - 1976/ 32/ 15.67H	R= 20.1R_E	11 - 1976/ 33/ 13.00H	R= 5.0R_E		
5 - 1976/ 32/ 17.17H	R= 19.9R_E	12 - 1976/ 33/ 14.25H	R= 2.4R_E		
6 - 1976/ 33/ 0.17H	R= 17.7R_E	13 - 1976/ 33/ 15.67H	R= 1.8R_E		
7 - 1976/ 33/ 3.50H	R= 15.0R_E	14 - 1976/ 33/ 15.00H	R= 1.6R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 31/16.00H TO1976/ 33/17.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



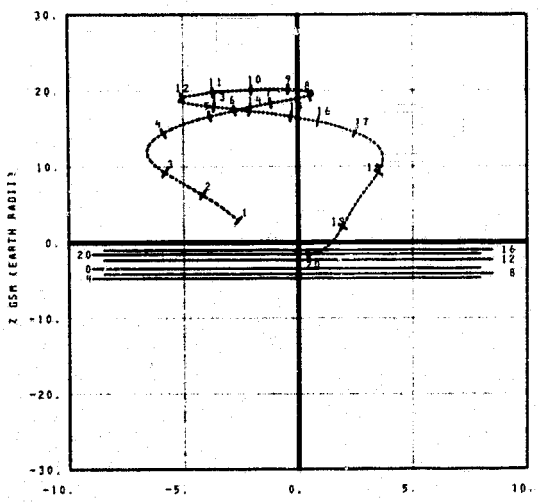
INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 33/ 17.00H LAT= 37.8
2 - 1976/ 33/ 18.33H LAT= 49.9
3 - 1976/ 33/ 19.75H LAT= 57.9
4 - 1976/ 33/ 21.33H LAT= 63.9
5 - 1976/ 33/ 23.33H LAT= 69.2
6 - 1976/ 34/ 1.67H LAT= 73.7
7 - 1976/ 34/ 7.50H LAT= 80.3
8 - 1976/ 34/ 9.50H LAT= 81.3
9 - 1976/ 34/ 10.50H LAT= 81.6
10 - 1976/ 34/ 11.50H LAT= 81.7
11 - 1976/ 34/ 12.50H LAT= 81.7
12 - 1976/ 34/ 13.00H LAT= 81.6
13 - 1976/ 34/ 14.00H LAT= 81.3
14 - 1976/ 34/ 15.00H LAT= 80.9
15 - 1976/ 34/ 16.00H LAT= 80.4
16 - 1976/ 34/ 21.00H LAT= 76.7
17 - 1976/ 35/ 3.50H LAT= 69.6
18 - 1976/ 35/ 14.83H LAT= 32.2
19 - 1976/ 35/ 17.17H LAT= -7.8
20 - 1976/ 35/ 17.83H LAT= -63.8

TIME AS YEAR/DAY/HOUR
LAT IS GSE LATITUDE IN DEGREES
TIME INTERVAL OF PLOT 1976/ 33/17.00H TO 1976/ 35/18.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



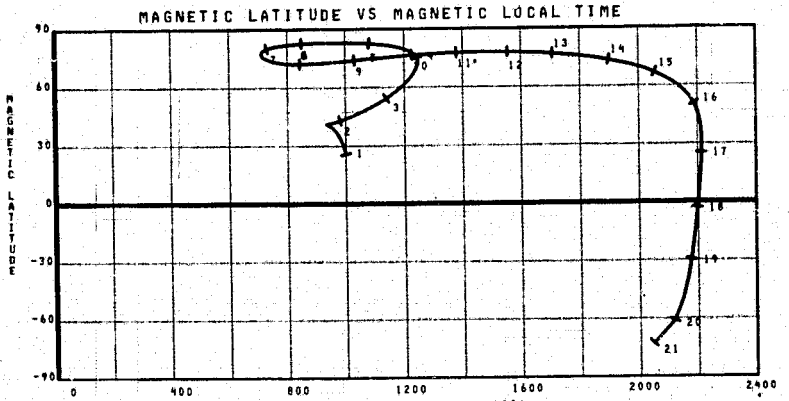
INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 33/ 17.00H R= 9.0R$_E$
2 - 1976/ 33/ 18.17H R= 9.8R$_E$
3 - 1976/ 33/ 21.67H R= 12.8R$_E$
4 - 1976/ 34/ 2.67H R= 16.1R$_E$
5 - 1976/ 34/ 9.00H R= 17.5R$_E$
6 - 1976/ 34/ 6.00H R= 18.0R$_E$
7 - 1976/ 34/ 7.50H R= 18.6R$_E$
8 - 1976/ 34/ 10.00H R= 19.4R$_E$
9 - 1976/ 34/ 14.50H R= 20.2R$_E$
10 - 1976/ 34/ 16.50H R= 20.3R$_E$
11 - 1976/ 34/ 18.50H R= 20.2R$_E$
12 - 1976/ 34/ 21.00H R= 19.8R$_E$
13 - 1976/ 35/ 1.50H R= 18.9R$_E$
14 - 1976/ 35/ 3.00H R= 17.9R$_E$
15 - 1976/ 35/ 4.50H R= 17.1R$_E$
16 - 1976/ 35/ 5.50H R= 16.4R$_E$
17 - 1976/ 35/ 7.17H R= 15.5R$_E$
18 - 1976/ 35/ 12.00H R= 11.1R$_E$
19 - 1976/ 35/ 16.33H R= 9.8R$_E$
20 - 1976/ 35/ 18.00H R= 1.7R$_E$

TIME AS YEAR/DAY/HOUR
R IS GEOCENTRIC DISTANCE IN EARTH RADII
TIME INTERVAL OF PLOT 1976/ 33/17.00H TO 1976/ 35/18.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



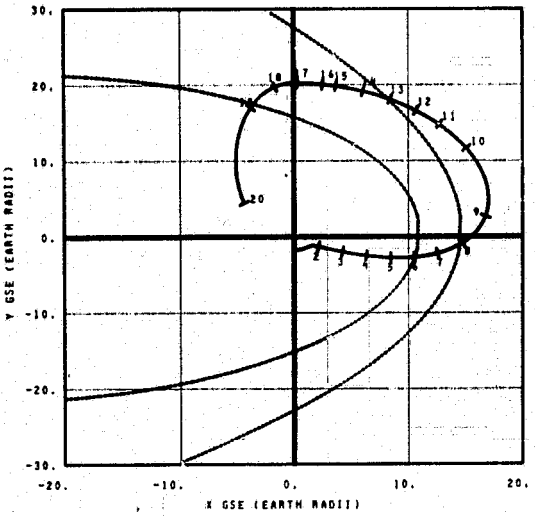
INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 33/ 17.00H R= 9.0R$_E$
2 - 1976/ 34/ 2.00H R= 15.7R$_E$
3 - 1976/ 34/ 7.00H R= 18.4R$_E$
4 - 1976/ 34/ 12.50H R= 19.9R$_E$
5 - 1976/ 34/ 15.00H R= 20.3R$_E$
6 - 1976/ 34/ 16.50H R= 20.3R$_E$
7 - 1976/ 34/ 18.00H R= 20.2R$_E$
8 - 1976/ 34/ 24.00H R= 19.1R$_E$
9 - 1976/ 35/ 3.00H R= 17.0R$_E$
10 - 1976/ 35/ 5.00H R= 16.0R$_E$
11 - 1976/ 35/ 6.17H R= 16.1R$_E$
12 - 1976/ 35/ 7.33H R= 15.3R$_E$
13 - 1976/ 35/ 8.33H R= 14.6R$_E$
14 - 1976/ 35/ 9.83H R= 13.3R$_E$
15 - 1976/ 35/ 11.67H R= 11.5R$_E$
16 - 1976/ 35/ 14.50H R= 7.0R$_E$
17 - 1976/ 35/ 16.50H R= 4.2R$_E$
18 - 1976/ 35/ 17.33H R= 2.7R$_E$
19 - 1976/ 35/ 17.67H R= 2.1R$_E$
20 - 1976/ 35/ 17.92H R= 1.7R$_E$
21 - 1976/ 35/ 18.00H R= 1.7R$_E$

TIME AS YEAR/DAY/HOUR
TIME INTERVAL OF PLOT 1976/ 33 /17.00H TO1976/ 35 /18.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 35/ 18.02H	LAT= -81.6	11 - 1976/ 36/ 13.67H	LAT=	81.6
2 - 1976/ 35/ 18.68H	LAT= -19.9	12 - 1976/ 36/ 14.67H	LAT=	81.7
3 - 1976/ 35/ 19.65H	LAT= 26.9	13 - 1976/ 36/ 15.67H	LAT=	81.7
4 - 1976/ 35/ 20.83H	LAT= 43.8	14 - 1976/ 36/ 16.67H	LAT=	81.5
5 - 1976/ 35/ 22.25H	LAT= 59.3	15 - 1976/ 36/ 17.67H	LAT=	81.2
6 - 1976/ 35/ 23.83H	LAT= 61.9	16 - 1976/ 36/ 18.17H	LAT=	81.0
7 - 1976/ 36/ 1.67H	LAT= 67.0	17 - 1976/ 36/ 19.17H	LAT=	80.5
8 - 1976/ 36/ 4.00H	LAT= 72.1	18 - 1976/ 37/ 0.17H	LAT=	76.0
9 - 1976/ 36/ 7.33H	LAT= 77.0	19 - 1976/ 37/ 7.17H	LAT=	69.1
10 - 1976/ 36/ 12.17H	LAT= 81.1	20 - 1976/ 37/ 18.75H	LAT=	30.9

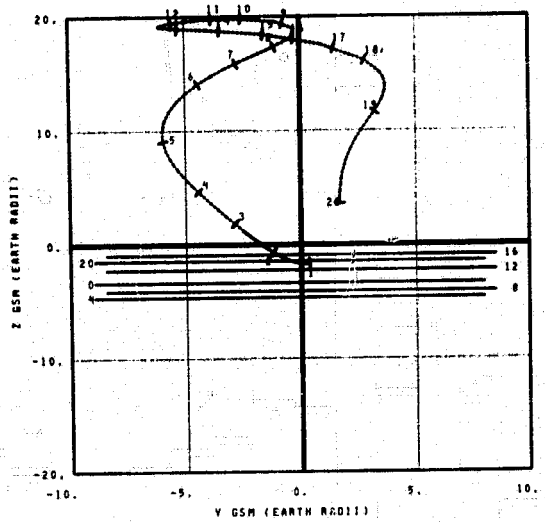
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 35/18.00H TO 1976/ 37/19.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 35/ 18.02H	R= 1.7RE	11 - 1976/ 36/ 17.67H	R= 20.2RE
2 - 1976/ 35/ 18.68H	R= 2.6RE	12 - 1976/ 36/ 20.17H	R= 20.3RE
3 - 1976/ 35/ 20.00H	R= 5.2RE	13 - 1976/ 37/ 0.67H	R= 19.7RE
4 - 1976/ 35/ 21.67H	R= 8.0RE	14 - 1976/ 37/ 2.67H	R= 19.2RE
5 - 1976/ 36/ 0.03H	R= 11.9RE	15 - 1976/ 37/ 4.17H	R= 18.7RE
6 - 1976/ 36/ 4.03H	R= 15.9RE	16 - 1976/ 37/ 5.17H	R= 18.9RE
7 - 1976/ 36/ 6.67H	R= 16.6RE	17 - 1976/ 37/ 6.67H	R= 17.7RE
8 - 1976/ 36/ 8.67H	R= 17.7RE	18 - 1976/ 37/ 8.17H	R= 16.9RE
9 - 1976/ 36/ 13.67H	R= 19.5RE	19 - 1976/ 37/ 13.33H	R= 13.1RE
10 - 1976/ 36/ 16.17H	R= 20.0RE	20 - 1976/ 37/ 19.00H	R= 5.0RE

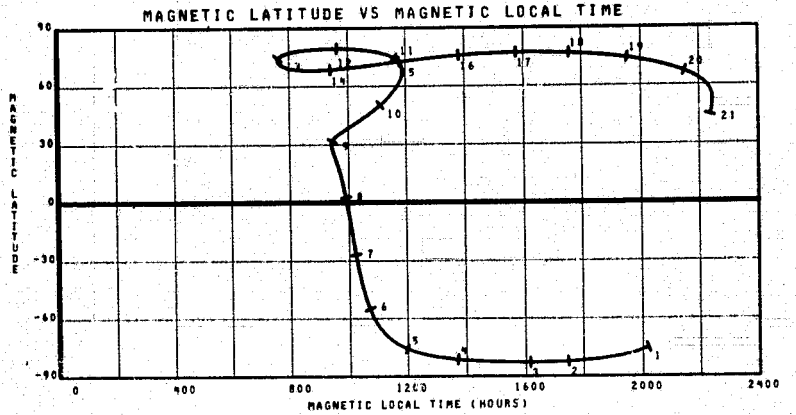
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 35/18.00H TO 1976/ 37/19.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

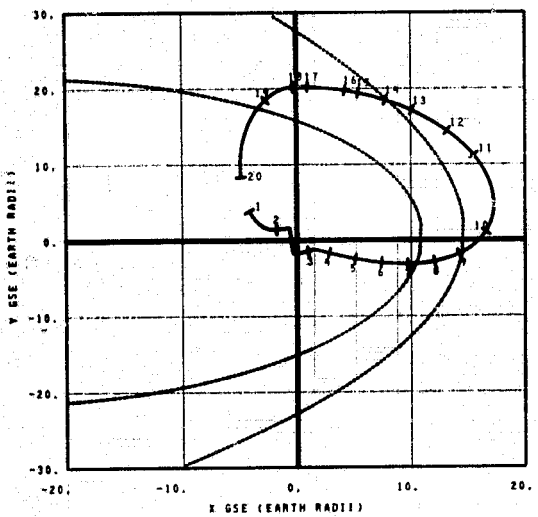
1 - 1976/ 35/ 18.02H	R= 1.7RE	8 - 1976/ 35/ 19.38H	R= 4.0RE
2 - 1976/ 35/ 18.68H	R= 1.7RE	9 - 1976/ 35/ 23.83H	R= 10.0RE
3 - 1976/ 35/ 18.18H	R= 1.7RE	10 - 1976/ 36/ 7.00H	R= 16.0RE
4 - 1976/ 35/ 18.13H	R= 1.7RE	11 - 1976/ 36/ 13.17H	R= 19.4RE
5 - 1976/ 35/ 18.18H	R= 1.8RE	12 - 1976/ 36/ 15.67H	R= 19.9RE
6 - 1976/ 35/ 18.35H	R= 1.9RE	13 - 1976/ 36/ 19.17H	R= 20.3RE
7 - 1976/ 35/ 18.67H	R= 2.5RE	14 - 1976/ 37/ 1.67H	R= 19.5RE
		15 - 1976/ 37/ 5.17H	R= 18.4RE
		16 - 1976/ 37/ 7.17H	R= 17.4RE
		17 - 1976/ 37/ 8.67H	R= 16.6RE
		18 - 1976/ 37/ 10.00H	R= 15.7RE
		19 - 1976/ 37/ 11.67H	R= 14.5RE
		20 - 1976/ 37/ 14.33H	R= 12.1RE
		21 - 1976/ 37/ 19.00H	R= 5.0RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 35 /18.00H TO1976/ 37 /19.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 37/ 19.00 H	LAT= 26.3	11 - 1976/ 38/ 15.50 H	LAT= 81.1
2 - 1976/ 37/ 20.75 H	LAT= -30.9	12 - 1976/ 38/ 17.00 H	LAT= 81.6
3 - 1976/ 37/ 21.33 H	LAT= -71.1	13 - 1976/ 38/ 18.50 H	LAT= 81.7
4 - 1976/ 37/ 22.22 H	LAT= 7.2	14 - 1976/ 38/ 19.50 H	LAT= 81.6
5 - 1976/ 37/ 23.42 H	LAT= 36.3	15 - 1976/ 38/ 20.50 H	LAT= 81.3
6 - 1976/ 38/ 0.83 H	LAT= 56.2	16 - 1976/ 38/ 21.00 H	LAT= 81.2
7 - 1976/ 38/ 2.50 H	LAT= 59.2	17 - 1976/ 38/ 22.50 H	LAT= 80.5
8 - 1976/ 38/ 4.50 H	LAT= 65.9	18 - 1976/ 38/ 24.00 H	LAT= 79.9
9 - 1976/ 38/ 6.67 H	LAT= 71.8	19 - 1976/ 39/ 7.50 H	LAT= 72.7
10 - 1976/ 38/ 9.83 H	LAT= 76.1	20 - 1976/ 39/ 19.67 H	LAT= 47.2

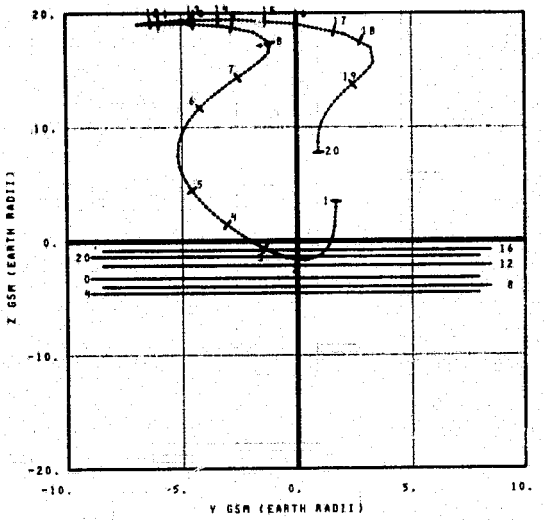
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 37/19.00H TO 1976/ 39/20.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 37/ 19.00 H	R= 5.6 R_E	11 - 1976/ 38/ 19.50 H	R= 20.0 R_E
2 - 1976/ 37/ 21.50 H	R= 1.9 R_E	12 - 1976/ 39/ 0.50 H	R= 20.2 R_E
3 - 1976/ 37/ 22.12 H	R= 3.0 R_E	13 - 1976/ 39/ 2.50 H	R= 20.0 R_E
4 - 1976/ 37/ 23.17 H	R= 5.2 R_E	14 - 1976/ 39/ 3.50 H	R= 19.8 R_E
5 - 1976/ 38/ 0.83 H	R= 7.9 R_E	15 - 1976/ 39/ 5.00 H	R= 19.5 R_E
6 - 1976/ 38/ 5.50 H	R= 13.3 R_E	16 - 1976/ 39/ 6.00 H	R= 19.2 R_E
7 - 1976/ 38/ 7.03 H	R= 15.2 R_E	17 - 1976/ 39/ 7.50 H	R= 18.7 R_E
8 - 1976/ 38/ 12.00 H	R= 17.7 R_E	18 - 1976/ 39/ 9.00 H	R= 18.1 R_E
9 - 1976/ 38/ 15.50 H	R= 19.1 R_E	19 - 1976/ 39/ 14.67 H	R= 14.7 R_E
10 - 1976/ 38/ 17.50 H	R= 19.7 R_E	20 - 1976/ 39/ 20.00 H	R= 9.2 R_E

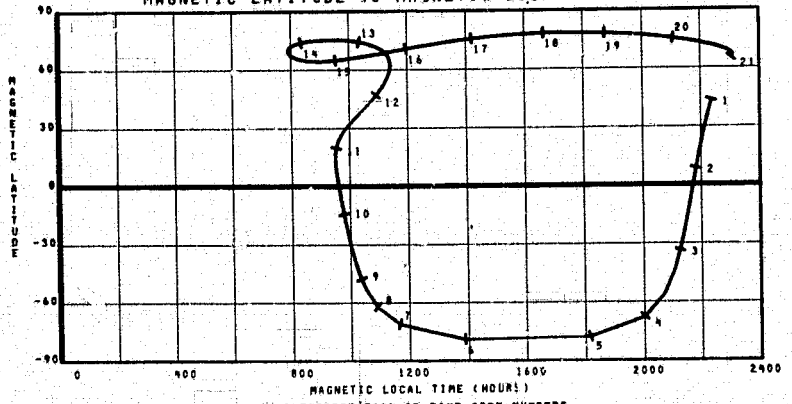
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 37/19.00H TO 1976/ 39/20.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

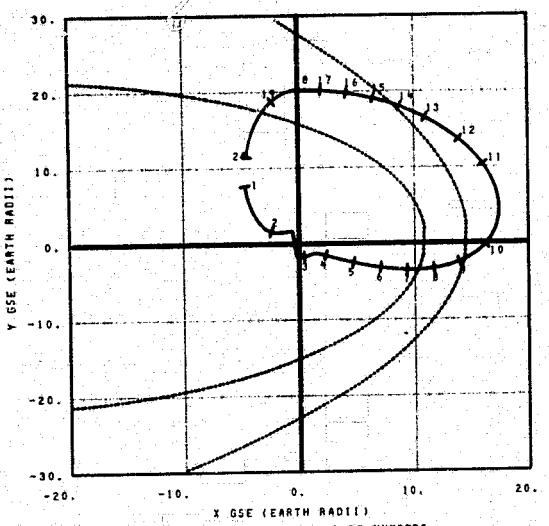
1 - 1976/ 37/ 19.00 H	R= 5.6 R_E	9 - 1976/ 37/ 21.50 H	R= 2.0 R_E
2 - 1976/ 37/ 20.50 H	R= 2.8 R_E	10 - 1976/ 37/ 21.73 H	R= 2.2 R_E
3 - 1976/ 37/ 21.00 H	R= 1.9 R_E	11 - 1976/ 37/ 22.33 H	R= 3.5 R_E
4 - 1976/ 37/ 21.25 H	R= 1.7 R_E	12 - 1976/ 38/ 1.00 H	R= 8.3 R_E
5 - 1976/ 37/ 21.33 H	R= 1.7 R_E	13 - 1976/ 38/ 7.50 H	R= 15.8 R_E
6 - 1976/ 37/ 21.42 H	R= 1.8 R_E	14 - 1976/ 38/ 10.00 H	R= 18.0 R_E
7 - 1976/ 37/ 21.50 H	R= 1.9 R_E	15 - 1976/ 38/ 13.50 H	R= 19.7 R_E
		16 - 1976/ 38/ 15.50 H	R= 20.1 R_E
		17 - 1976/ 38/ 17.50 H	R= 19.7 R_E
		18 - 1976/ 39/ 2.00 H	R= 19.2 R_E
		19 - 1976/ 39/ 6.00 H	R= 19.2 R_E
		20 - 1976/ 39/ 8.50 H	R= 18.3 R_E
		21 - 1976/ 39/ 10.50 H	R= 17.0 R_E
		22 - 1976/ 39/ 12.00 H	R= 16.0 R_E
		23 - 1976/ 39/ 14.17 H	R= 14.0 R_E
		24 - 1976/ 39/ 20.00 H	R= 9.2 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 37/19.00H TO1976/ 39/20.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 39/ 20.17H	LAT=	84.6	11 - 1976/ 40/ 18.67H	LAT=	81.1
2 - 1976/ 39/ 23.67H	LAT=	-10.2	12 - 1976/ 40/ 20.17H	LAT=	81.6
3 - 1976/ 40/ 0.50H	LAT=	-77.7	13 - 1976/ 40/ 21.67H	LAT=	81.7
4 - 1976/ 40/ 1.20H	LAT=	-9.7	14 - 1976/ 40/ 22.67H	LAT=	81.6
5 - 1976/ 40/ 2.92H	LAT=	33.0	15 - 1976/ 40/ 23.67H	LAT=	81.4
6 - 1976/ 40/ 3.83H	LAT=	48.6	16 - 1976/ 41/ 0.67H	LAT=	81.0
7 - 1976/ 40/ 5.50H	LAT=	58.2	17 - 1976/ 41/ 1.67H	LAT=	80.5
8 - 1976/ 40/ 7.50H	LAT=	65.3	18 - 1976/ 41/ 2.67H	LAT=	79.9
9 - 1976/ 40/ 9.67H	LAT=	70.5	19 - 1976/ 41/ 10.17H	LAT=	73.9
10 - 1976/ 40/ 12.50H	LAT=	75.3	20 - 1976/ 41/ 20.50H	LAT=	56.0

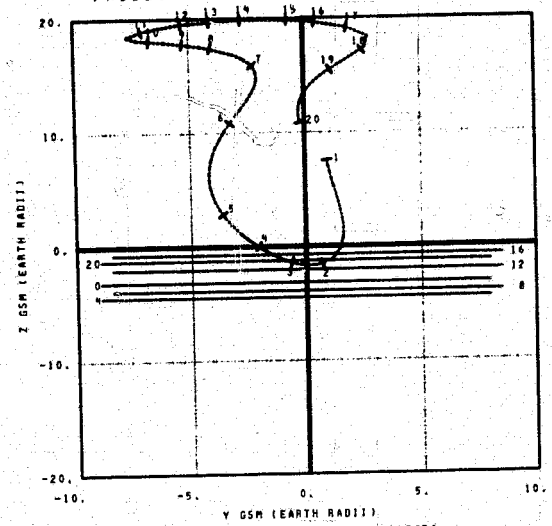
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 39/20.00H TO 1976/ 41/21.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 39/ 20.17H	R=	9.0RE	11 - 1976/ 41/ 0.67H	R=	20.2RE
2 - 1976/ 40/ 0.92H	R=	1.7RE	12 - 1976/ 41/ 2.67H	R=	20.3RE
3 - 1976/ 40/ 0.93H	R=	2.2RE	13 - 1976/ 41/ 3.67H	R=	20.2RE
4 - 1976/ 40/ 1.65H	R=	3.7RE	14 - 1976/ 41/ 4.67H	R=	20.1RE
5 - 1976/ 40/ 3.00H	R=	6.3RE	15 - 1976/ 41/ 6.17H	R=	19.9RE
6 - 1976/ 40/ 7.67H	R=	12.3RE	16 - 1976/ 41/ 7.17H	R=	19.7RE
7 - 1976/ 40/ 13.00H	R=	16.5RE	17 - 1976/ 41/ 8.67H	R=	19.4RE
8 - 1976/ 40/ 16.17H	R=	18.2RE	18 - 1976/ 41/ 13.17H	R=	17.6RE
9 - 1976/ 40/ 17.67H	R=	18.8RE	19 - 1976/ 41/ 16.00H	R=	16.0RE
10 - 1976/ 40/ 19.67H	R=	19.4RE	20 - 1976/ 41/ 21.00H	R=	11.8RE

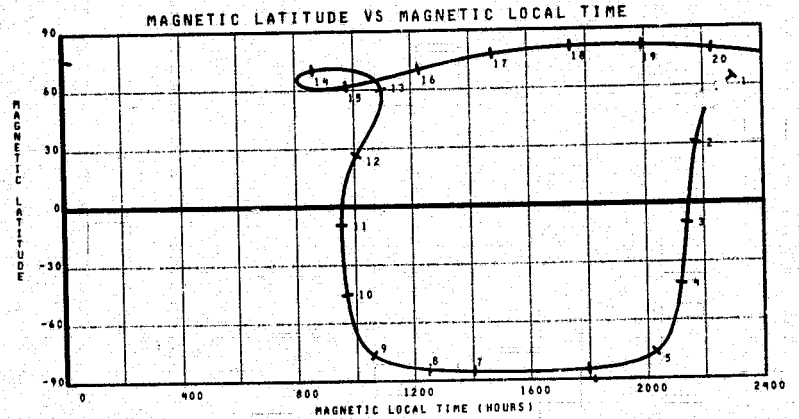
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 39/20.00H TO 1976/ 41/21.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

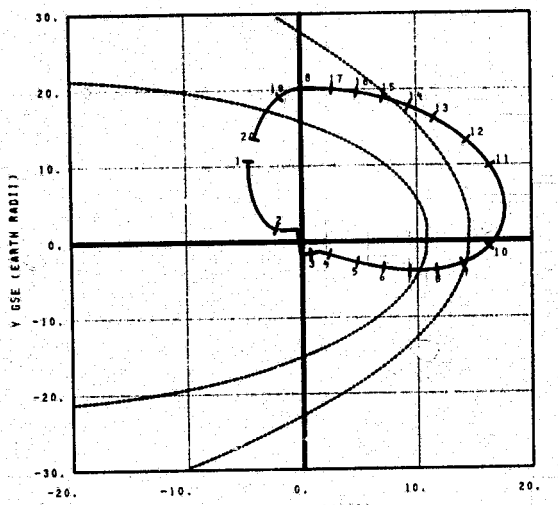
1 - 1976/ 39/ 20.17H	R=	9.0RE	8 - 1976/ 40/ 8.68H	R=	1.8RE	15 - 1976/ 41/ 2.67H	R=	20.3RE
2 - 1976/ 39/ 23.92H	R=	3.4RE	9 - 1976/ 40/ 0.75H	R=	1.9RE	16 - 1976/ 41/ 7.17H	R=	19.7RE
3 - 1976/ 40/ 0.08H	R=	2.1RE	10 - 1976/ 40/ 1.08H	R=	2.5RE	17 - 1976/ 41/ 10.17H	R=	18.9RE
4 - 1976/ 40/ 0.33H	R=	1.6RE	11 - 1976/ 40/ 1.97H	R=	4.2RE	18 - 1976/ 41/ 12.17H	R=	18.1RE
5 - 1976/ 40/ 0.97H	R=	1.7RE	12 - 1976/ 40/ 5.25H	R=	9.6RE	19 - 1976/ 41/ 13.67H	R=	17.4RE
6 - 1976/ 40/ 0.63H	R=	1.8RE	13 - 1976/ 40/ 11.58H	R=	15.6RE	20 - 1976/ 41/ 19.67H	R=	16.2RE
7 - 1976/ 40/ 0.67H	R=	1.8RE	14 - 1976/ 40/ 17.17H	R=	18.6RE			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 39 /20.00H TO1976/ 41 /21.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 91/ 21.17H	LAT= 59.0	11 - 1976/ 92/ 22.00H	LAT=	81.1
2 - 1976/ 92/ 2.92H	LAT= -12.0	12 - 1976/ 92/ 23.50H	LAT=	81.4
3 - 1976/ 92/ 3.75H	LAT= -73.5	13 - 1976/ 93/ 1.00H	LAT=	81.7
4 - 1976/ 92/ 4.47H	LAT= -1.9	14 - 1976/ 93/ 2.00H	LAT=	81.6
5 - 1976/ 92/ 5.75H	LAT= 39.7	15 - 1976/ 93/ 3.00H	LAT=	81.4
6 - 1976/ 92/ 7.17H	LAT= 69.4	16 - 1976/ 93/ 4.00H	LAT=	81.0
7 - 1976/ 92/ 8.83H	LAT= 80.6	17 - 1976/ 93/ 5.00H	LAT=	80.5
8 - 1976/ 92/ 10.83H	LAT= 65.8	18 - 1976/ 93/ 6.50H	LAT=	79.6
9 - 1976/ 92/ 13.00H	LAT= 70.6	19 - 1976/ 93/ 12.50H	LAT=	79.9
10 - 1976/ 92/ 15.83H	LAT= 79.9	20 - 1976/ 93/ 21.67H	LAT=	81.1

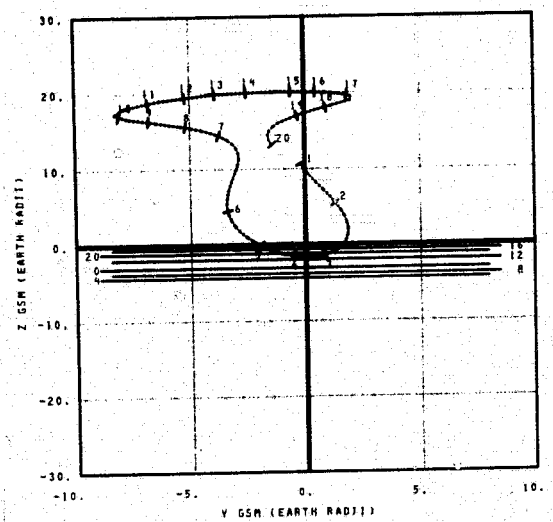
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 91/21.00H TO 1976/ 93/22.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 91/ 21.17H	R= 11.7RE	11 - 1976/ 92/ 2.00H	R= 20.0RE
2 - 1976/ 92/ 0.67H	R= 7.1RE	12 - 1976/ 93/ 3.50H	R= 20.2RE
3 - 1976/ 92/ 3.50H	R= 1.8RE	13 - 1976/ 93/ 4.50H	R= 20.3RE
4 - 1976/ 92/ 4.00H	R= 1.9RE	14 - 1976/ 93/ 5.50H	R= 20.3RE
5 - 1976/ 92/ 4.68H	R= 3.3RE	15 - 1976/ 93/ 7.00H	R= 20.2RE
6 - 1976/ 92/ 6.75H	R= 7.1RE	16 - 1976/ 93/ 8.00H	R= 20.1RE
7 - 1976/ 92/ 19.67H	R= 15.5RE	17 - 1976/ 93/ 10.00H	R= 19.8RE
8 - 1976/ 92/ 16.83H	R= 16.7RE	18 - 1976/ 93/ 15.00H	R= 18.3RE
9 - 1976/ 92/ 19.00H	R= 18.0RE	19 - 1976/ 93/ 17.00H	R= 17.3RE
10 - 1976/ 92/ 21.50H	R= 19.0RE	20 - 1976/ 93/ 22.00H	R= 13.9RE

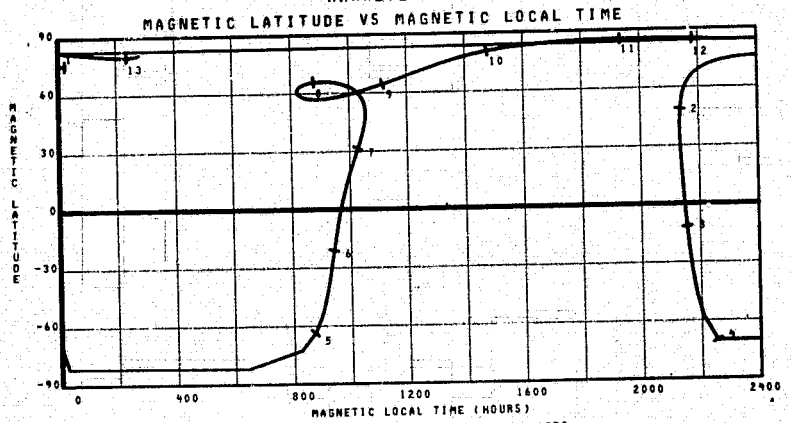
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 91/21.00H TO 1976/ 93/22.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

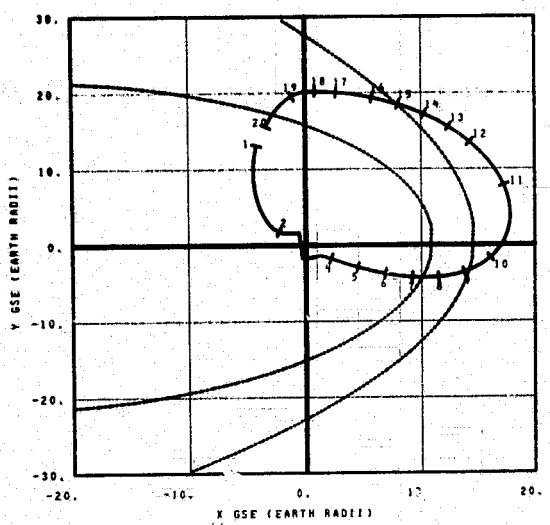
1 - 1976/ 91/ 21.17H	R= 11.7RE	8 - 1976/ 92/ 16.83H	R= 16.9RE
2 - 1976/ 92/ 2.17H	R= 4.4RE	9 - 1976/ 93/ 6.00H	R= 20.3RE
3 - 1976/ 92/ 3.33H	R= 2.0RE	10 - 1976/ 93/ 11.50H	R= 19.9RE
4 - 1976/ 92/ 3.75H	R= 1.7RE	11 - 1976/ 93/ 14.00H	R= 18.7RE
5 - 1976/ 92/ 4.08H	R= 2.1RE	12 - 1976/ 93/ 15.00H	R= 18.3RE
6 - 1976/ 92/ 4.75H	R= 3.4RE	13 - 1976/ 93/ 20.17H	R= 15.9RE
7 - 1976/ 92/ 8.00H	R= 9.1RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 91 /21.00H TO1976/ 93 /22.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 93/ 22.17H	LAT=	60.0	11 - 1976/ 95/	0.67H	LAT=	80.8
2 - 1976/ 94/ 6.00H	LAT=	-9.2	12 - 1976/ 95/	3.17H	LAT=	81.7
3 - 1976/ 94/ 6.92H	LAT=	-79.5	13 - 1976/ 95/	4.17H	LAT=	81.7
4 - 1976/ 94/ 7.67H	LAT=	-2.8	14 - 1976/ 95/	5.17H	LAT=	81.6
5 - 1976/ 94/ 8.92H	LAT=	33.9	15 - 1976/ 95/	6.17H	LAT=	81.9
6 - 1976/ 94/ 10.92H	LAT=	69.6	16 - 1976/ 95/	7.17H	LAT=	81.8
7 - 1976/ 94/ 12.80H	LAT=	58.7	17 - 1976/ 95/	8.67H	LAT=	80.3
8 - 1976/ 94/ 14.00H	LAT=	65.3	18 - 1976/ 95/	9.67H	LAT=	79.7
9 - 1976/ 94/ 16.17H	LAT=	78.9	19 - 1976/ 95/	14.17H	LAT=	76.0
10 - 1976/ 94/ 18.83H	LAT=	79.8	20 - 1976/ 95/	22.50H	LAT=	65.7

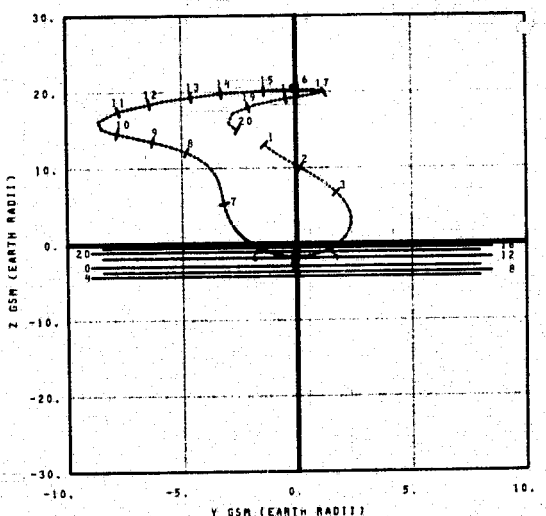
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 93/22.00H TO 1976/ 95/23.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 93/ 22.17H	R= 13.8RE	11 - 1976/ 95/ 1.67H	R= 19.3RE
2 - 1976/ 94/ 1.00H	R= 11.0RE	12 - 1976/ 95/ 3.17H	R= 19.7RE
3 - 1976/ 94/ 3.17H	R= 8.2RE	13 - 1976/ 95/ 4.67H	R= 20.0RE
4 - 1976/ 94/ 4.33H	R= 2.4RE	14 - 1976/ 95/ 5.67H	R= 20.1RE
5 - 1976/ 94/ 7.00H	R= 1.7RE	15 - 1976/ 95/ 7.17H	R= 20.2RE
6 - 1976/ 94/ 7.63H	R= 2.7RE	16 - 1976/ 95/ 8.67H	R= 20.3RE
7 - 1976/ 94/ 10.25H	R= 7.6RE	17 - 1976/ 95/ 12.17H	R= 20.0RE
8 - 1976/ 94/ 15.67H	R= 13.8RE	18 - 1976/ 95/ 15.67H	R= 19.2RE
9 - 1976/ 94/ 17.83H	R= 15.5RE	19 - 1976/ 95/ 18.17H	R= 18.3RE
10 - 1976/ 94/ 20.17H	R= 17.0RE	20 - 1976/ 95/ 23.00H	R= 15.6RE

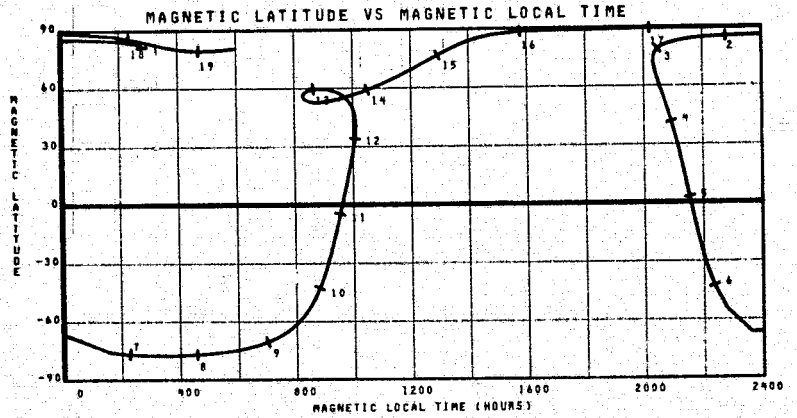
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 93/22.00H TO 1976/ 95/23.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

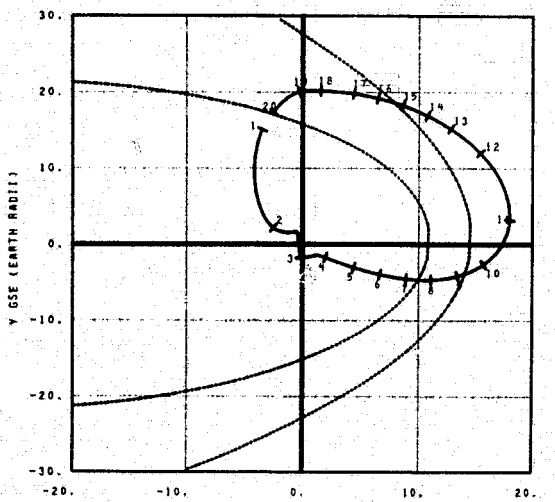
1 - 1976/ 93/ 22.17H	R= 13.8RE	8 - 1976/ 94/ 7.07H	R= 1.8RE	15 - 1976/ 95/ 10.67H	R= 20.2RE
2 - 1976/ 94/ 1.17H	R= 10.0RE	9 - 1976/ 94/ 7.15H	R= 1.9RE	16 - 1976/ 95/ 14.17H	R= 19.6RE
3 - 1976/ 94/ 2.67H	R= 6.9RE	10 - 1976/ 94/ 7.43H	R= 2.3RE	17 - 1976/ 95/ 14.67H	R= 19.5RE
4 - 1976/ 94/ 5.50H	R= 4.2RE	11 - 1976/ 94/ 8.17H	R= 3.9RE	18 - 1976/ 95/ 16.17H	R= 19.0RE
5 - 1976/ 94/ 6.33H	R= 2.9RE	12 - 1976/ 94/ 10.50H	R= 8.0RE	19 - 1976/ 95/ 20.67H	R= 17.1RE
6 - 1976/ 94/ 6.75H	R= 1.8RE	13 - 1976/ 94/ 17.33H	R= 15.1RE		
7 - 1976/ 94/ 7.02H	R= 1.7RE	14 - 1976/ 94/ 9.17H	R= 20.0RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 93 /22.00H TO1975/ 95 /23.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 45/ 23.17 H	LAT= 69.6	11 - 1976/ 47/ 2.00 H	LAT= 79.9
2 - 1976/ 46/ 9.00 H	LAT= 0.7	12 - 1976/ 47/ 6.00 H	LAT= 81.6
3 - 1976/ 46/ 10.00 H	LAT= -81.6	13 - 1976/ 47/ 7.50 H	LAT= 81.7
4 - 1976/ 46/ 10.77 H	LAT= -10.0	14 - 1976/ 47/ 8.50 H	LAT= 81.6
5 - 1976/ 46/ 12.00 H	LAT= 33.1	15 - 1976/ 47/ 9.50 H	LAT= 81.4
6 - 1976/ 46/ 13.50 H	LAT= 48.6	16 - 1976/ 47/ 10.50 H	LAT= 81.0
7 - 1976/ 46/ 15.17 H	LAT= 58.1	17 - 1976/ 47/ 11.50 H	LAT= 80.5
8 - 1976/ 46/ 17.00 H	LAT= 69.6	18 - 1976/ 47/ 13.00 H	LAT= 79.6
9 - 1976/ 46/ 19.17 H	LAT= 70.0	19 - 1976/ 47/ 15.00 H	LAT= 78.2
10 - 1976/ 46/ 21.67 H	LAT= 74.9	20 - 1976/ 47/ 23.00 H	LAT= 69.8

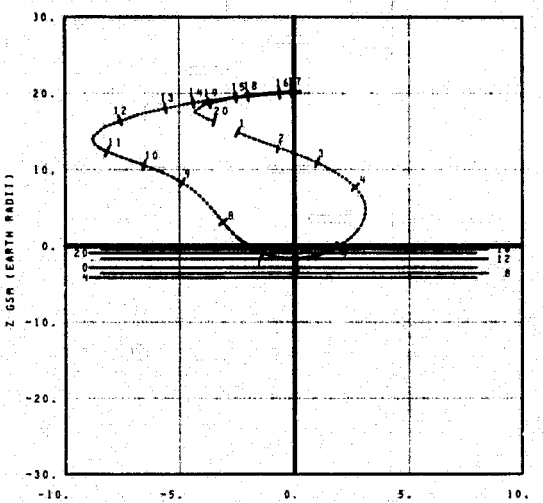
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 45/23.00H TO 1976/ 48/ 0.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 45/ 23.17 H	R= 15.5 R_E	11 - 1976/ 46/ 21.00 H	R= 15.5 R_E
2 - 1976/ 46/ 1.67 H	R= 13.9 R_E	12 - 1976/ 47/ 2.50 H	R= 18.5 R_E
3 - 1976/ 46/ 3.50 H	R= 11.0 R_E	13 - 1976/ 47/ 4.50 H	R= 19.2 R_E
4 - 1976/ 46/ 5.67 H	R= 9.2 R_E	14 - 1976/ 47/ 5.50 H	R= 19.5 R_E
5 - 1976/ 46/ 9.25 H	R= 8.0 R_E	15 - 1976/ 47/ 7.00 H	R= 19.8 R_E
6 - 1976/ 46/ 10.88 H	R= 1.7 R_E	16 - 1976/ 47/ 9.00 H	R= 20.1 R_E
7 - 1976/ 46/ 10.67 H	R= 2.4 R_E	17 - 1976/ 47/ 13.50 H	R= 20.2 R_E
8 - 1976/ 46/ 12.42 H	R= 5.9 R_E	18 - 1976/ 47/ 16.50 H	R= 19.8 R_E
9 - 1976/ 46/ 15.83 H	R= 10.8 R_E	19 - 1976/ 47/ 19.00 H	R= 19.2 R_E
10 - 1976/ 46/ 18.33 H	R= 13.3 R_E	20 - 1976/ 47/ 24.00 H	R= 17.0 R_E

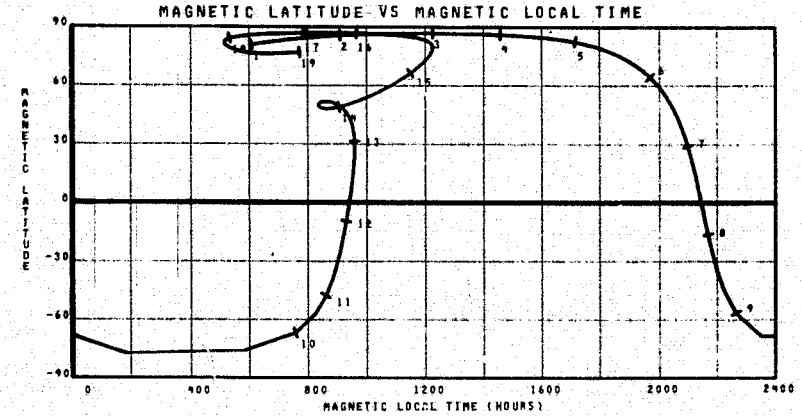
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 45/23.00H TO 1976/ 48/ 0.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

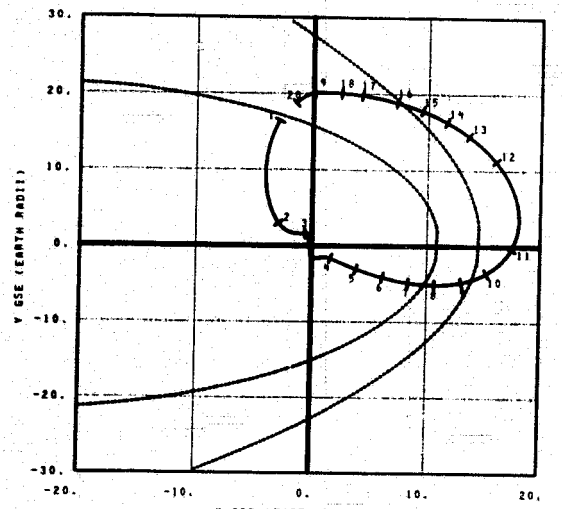
1 - 1976/ 45/ 23.17 H	R= 15.5 R_E	8 - 1976/ 46/ 9.67 H	R= 2.2 R_E	15 - 1976/ 47/ 8.50 H	R= 20.1 R_E
2 - 1976/ 46/ 1.67 H	R= 13.9 R_E	9 - 1976/ 46/ 10.00 H	R= 1.7 R_E	16 - 1976/ 47/ 10.50 H	R= 20.1 R_E
3 - 1976/ 46/ 3.50 H	R= 12.0 R_E	10 - 1976/ 46/ 10.33 H	R= 1.0 R_E	17 - 1976/ 47/ 13.00 H	R= 20.1 R_E
4 - 1976/ 46/ 5.00 H	R= 12.3 R_E	11 - 1976/ 46/ 10.50 H	R= 2.1 R_E	18 - 1976/ 47/ 16.00 H	R= 19.8 R_E
5 - 1976/ 46/ 9.00 H	R= 11.2 R_E	12 - 1976/ 46/ 11.83 H	R= 3.1 R_E	19 - 1976/ 47/ 24.00 H	R= 17.0 R_E
6 - 1976/ 46/ 6.67 H	R= 7.0 R_E	13 - 1976/ 46/ 12.83 H	R= 6.6 R_E		
7 - 1976/ 46/ 8.83 H	R= 3.9 R_E	14 - 1976/ 47/ 1.50 H	R= 18.0 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 45 /23.00H TO1976/ 48 / 0.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 98/ 0.50H	LAT=	67.7	11 - 1976/ 99/ 3.50H	LAT=	77.7
2 - 1976/ 98/ 11.92H	LAT=	18.9	12 - 1976/ 99/ 9.17H	LAT=	81.5
3 - 1976/ 98/ 13.17H	LAT=	-66.6	13 - 1976/ 99/ 10.67H	LAT=	81.7
4 - 1976/ 98/ 13.85H	LAT=	-20.1	14 - 1976/ 99/ 11.67H	LAT=	81.6
5 - 1976/ 98/ 15.12H	LAT=	38.8	15 - 1976/ 99/ 12.67H	LAT=	81.4
6 - 1976/ 98/ 16.50H	LAT=	47.5	16 - 1976/ 99/ 13.67H	LAT=	81.0
7 - 1976/ 98/ 18.17H	LAT=	57.1	17 - 1976/ 99/ 15.17H	LAT=	80.3
8 - 1976/ 98/ 20.00H	LAT=	64.0	18 - 1976/ 99/ 16.17H	LAT=	79.7
9 - 1976/ 98/ 22.17H	LAT=	69.5	19 - 1976/ 99/ 17.67H	LAT=	78.6
10 - 1976/ 99/ 0.50H	LAT=	73.8	20 - 1976/ 99/ 23.17H	LAT=	73.5

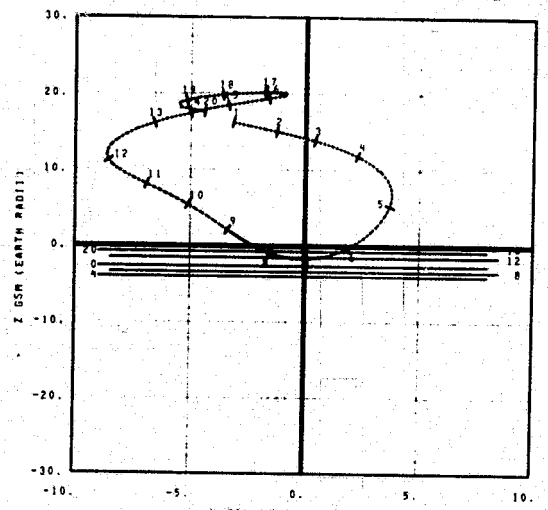
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 98/ 0.00H TO 1976/ 98/ 1.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 98/ 0.50H	R= 16.7R_E	11 - 1976/ 98/ 19.83H	R= 11.6R_E
2 - 1976/ 98/ 2.50H	R= 15.9R_E	12 - 1976/ 98/ 23.33H	R= 14.8R_E
3 - 1976/ 98/ 4.00H	R= 14.3R_E	13 - 1976/ 99/ 4.17H	R= 17.2R_E
4 - 1976/ 98/ 5.83H	R= 12.7R_E	14 - 1976/ 99/ 5.67H	R= 18.5R_E
5 - 1976/ 98/ 10.08H	R= 7.5R_E	15 - 1976/ 99/ 7.17H	R= 19.8R_E
6 - 1976/ 98/ 12.58H	R= 2.8R_E	16 - 1976/ 99/ 9.17H	R= 19.6R_E
7 - 1976/ 98/ 13.33H	R= 1.7R_E	17 - 1976/ 99/ 14.67H	R= 20.3R_E
8 - 1976/ 98/ 13.95H	R= 2.5R_E	18 - 1976/ 99/ 17.17H	R= 20.2R_E
9 - 1976/ 98/ 15.33H	R= 5.3R_E	19 - 1976/ 99/ 19.67H	R= 19.0R_E
10 - 1976/ 98/ 17.42H	R= 8.7R_E	20 - 1976/ 99/ 0.67H	R= 18.3R_E

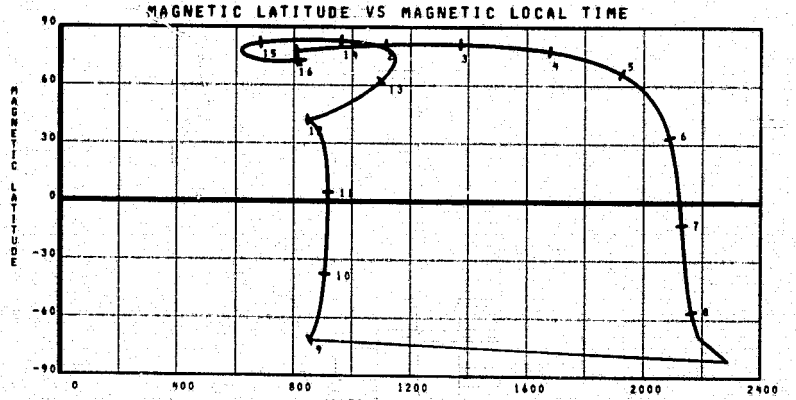
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 98/ 0.00H TO 1976/ 98/ 1.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

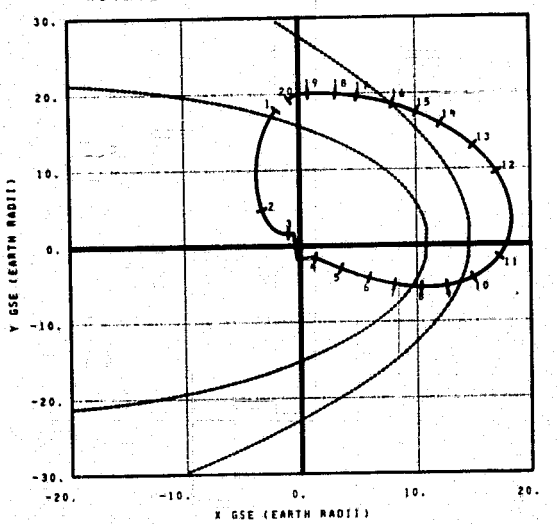
1 - 1976/ 98/ 0.50H	R= 16.7R_E	8 - 1976/ 98/ 13.17H	R= 1.0R_E
2 - 1976/ 98/ 2.17H	R= 15.9R_E	9 - 1976/ 98/ 13.50H	R= 1.0R_E
3 - 1976/ 98/ 4.50H	R= 13.9R_E	10 - 1976/ 98/ 13.78H	R= 2.1R_E
4 - 1976/ 98/ 6.17H	R= 12.3R_E	11 - 1976/ 98/ 14.53H	R= 3.7R_E
5 - 1976/ 98/ 8.50H	R= 9.7R_E	12 - 1976/ 98/ 22.33H	R= 14.0R_E
6 - 1976/ 98/ 11.50H	R= 4.9R_E	13 - 1976/ 99/ 0.17H	R= 17.3R_E
7 - 1976/ 98/ 12.75H	R= 2.9R_E	14 - 1976/ 99/ 14.17H	R= 20.3R_E
		15 - 1976/ 99/ 16.17H	R= 20.2R_E
		16 - 1976/ 99/ 0.17H	R= 18.9R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 98 / 0.00H TO1976/ 98 / 1.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 50/ 1.17 H	LAT= 71.2	11 - 1976/ 51/ 6.33 H	LAT= 77.3		
2 - 1976/ 50/ 14.25 H	LAT= 28.8	12 - 1976/ 51/ 12.00 H	LAT= 81.4		
3 - 1976/ 50/ 16.25 H	LAT= -49.2	13 - 1976/ 51/ 13.33 H	LAT= 81.7		
4 - 1976/ 50/ 16.92 H	LAT= -35.1	14 - 1976/ 51/ 15.00 H	LAT= 81.4		
5 - 1976/ 50/ 18.17 H	LAT= 26.6	15 - 1976/ 51/ 16.06 H	LAT= 81.9		
6 - 1976/ 50/ 19.67 H	LAT= 56.9	16 - 1976/ 51/ 17.00 H	LAT= 81.8		
7 - 1976/ 50/ 21.25 H	LAT= 56.9	17 - 1976/ 51/ 18.50 H	LAT= 80.3		
8 - 1976/ 50/ 23.17 H	LAT= 63.0	18 - 1976/ 51/ 19.50 H	LAT= 79.6		
9 - 1976/ 51/ 1.17 H	LAT= 69.8	19 - 1976/ 51/ 21.00 H	LAT= 78.6		
10 - 1976/ 51/ 3.50 H	LAT= 73.9	20 - 1976/ 52/ 1.00 H	LAT= 79.0		

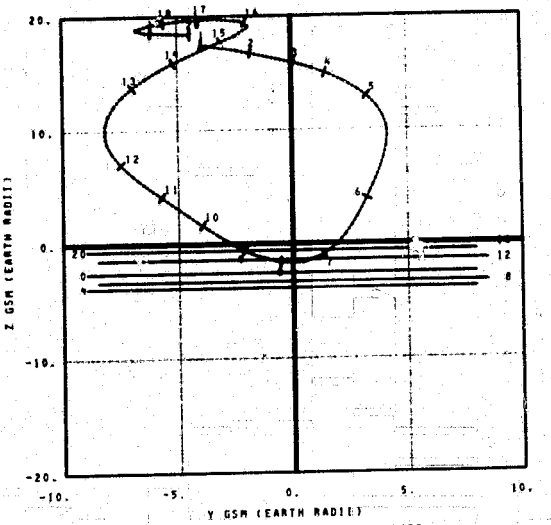
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 50/ 1.00H TO 1976/ 52/ 2.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 50/ 1.17 H	R= 18.1RE	11 - 1976/ 50/ 20.33 H	R= 8.2RE
2 - 1976/ 50/ 3.17 H	R= 17.1RE	12 - 1976/ 50/ 22.67 H	R= 11.2RE
3 - 1976/ 50/ 4.67 H	R= 16.2RE	13 - 1976/ 51/ 0.17 H	R= 16.6RE
4 - 1976/ 50/ 5.83 H	R= 15.4RE	14 - 1976/ 51/ 1.17 H	R= 17.2RE
5 - 1976/ 50/ 7.83 H	R= 13.8RE	15 - 1976/ 51/ 2.50 H	R= 18.3RE
6 - 1976/ 50/ 10.00 H	R= 6.2RE	16 - 1976/ 51/ 13.00 H	R= 19.7RE
7 - 1976/ 50/ 16.17 H	R= 2.1RE	17 - 1976/ 51/ 16.50 H	R= 20.2RE
8 - 1976/ 50/ 16.83 H	R= 1.9RE	18 - 1976/ 51/ 18.50 H	R= 20.3RE
9 - 1976/ 50/ 17.67 H	R= 3.1RE	19 - 1976/ 51/ 21.00 H	R= 19.6RE
10 - 1976/ 50/ 18.67 H	R= 5.5RE	20 - 1976/ 52/ 2.00 H	R= 19.0RE

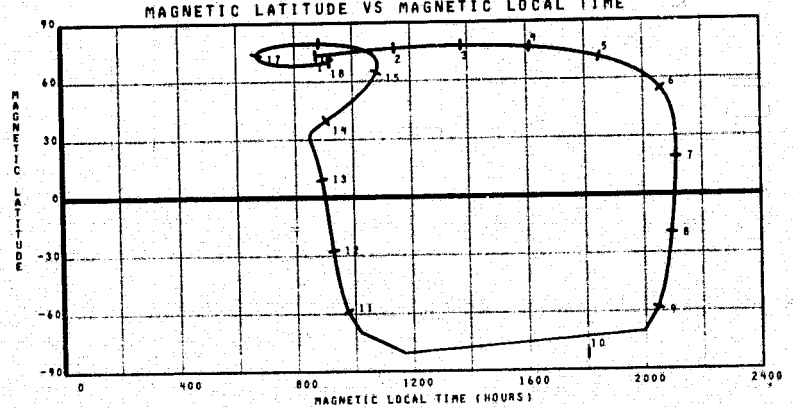
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 50/ 1.00H TO 1976/ 52/ 2.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

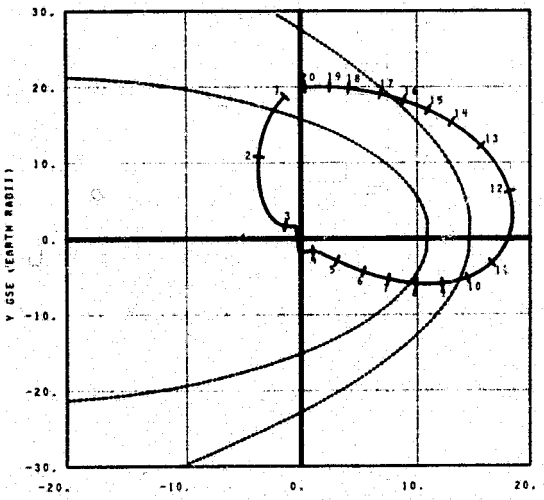
1 - 1976/ 50/ 1.17 H	R= 18.1RE	8 - 1976/ 50/ 16.08 H	R= 2.2RE	15 - 1976/ 51/ 9.50 H	R= 18.7RE
2 - 1976/ 50/ 3.17 H	R= 17.1RE	9 - 1976/ 50/ 16.42 H	R= 1.7RE	16 - 1976/ 51/ 14.50 H	R= 20.0RE
3 - 1976/ 50/ 4.67 H	R= 16.2RE	10 - 1976/ 50/ 16.58 H	R= 1.7RE	17 - 1976/ 51/ 16.50 H	R= 20.3RE
4 - 1976/ 50/ 5.83 H	R= 15.4RE	11 - 1976/ 50/ 16.83 H	R= 1.9RE	18 - 1976/ 52/ 2.00 H	R= 19.0RE
5 - 1976/ 50/ 7.33 H	R= 14.2RE	12 - 1976/ 50/ 17.17 H	R= 2.5RE		
6 - 1976/ 50/ 9.33 H	R= 12.4RE	13 - 1976/ 50/ 18.17 H	R= 4.6RE		
7 - 1976/ 50/ 12.67 H	R= 8.0RE	14 - 1976/ 51/ 2.50 H	R= 14.8RE		
7 - 1976/ 50/ 15.33 H	R= 3.8RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 50 / 1.00H TO1976/ 52 / 2.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 52/ 2.50H	LAT= 73.5	11 - 1976/ 53/ 8.83H	LAT= 76.4
2 - 1976/ 52/ 13.58H	LAT= 53.6	12 - 1976/ 53/ 14.17H	LAT= 81.0
3 - 1976/ 52/ 19.33H	LAT= -34.9	13 - 1976/ 53/ 16.67H	LAT= 81.7
4 - 1976/ 52/ 20.00H	LAT= -51.8	14 - 1976/ 53/ 18.17H	LAT= 81.6
5 - 1976/ 52/ 21.20H	LAT= 22.1	15 - 1976/ 53/ 19.17H	LAT= 81.4
6 - 1976/ 52/ 22.67H	LAT= 44.3	16 - 1976/ 53/ 20.17H	LAT= 81.1
7 - 1976/ 53/ 0.25H	LAT= 55.2	17 - 1976/ 53/ 21.17H	LAT= 80.6
8 - 1976/ 53/ 2.17H	LAT= 63.0	18 - 1976/ 53/ 22.67H	LAT= 79.7
9 - 1976/ 53/ 4.17H	LAT= 68.4	19 - 1976/ 53/ 23.67H	LAT= 79.0
10 - 1976/ 53/ 6.33H	LAT= 72.7	20 - 1976/ 54/ 1.17H	LAT= 77.9

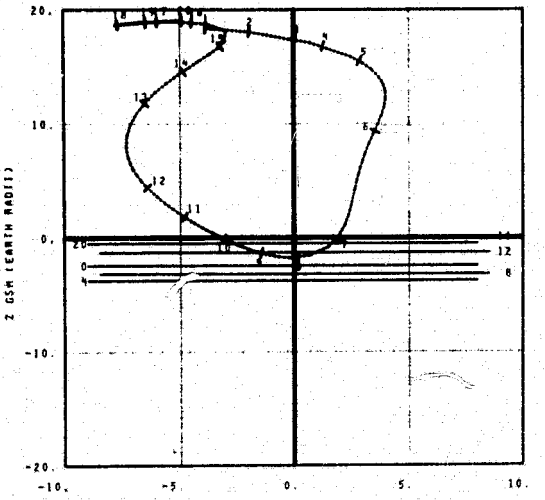
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 52/ 2.00H TO 1976/ 54/ 3.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 52/ 2.50H R= 10.8R_E	11 - 1976/ 52/ 22.33H R= 6.3R_E
2 - 1976/ 52/ 4.00H R= 10.2R_E	12 - 1976/ 52/ 24.00H R= 0.9R_E
3 - 1976/ 52/ 5.50H R= 17.5R_E	13 - 1976/ 53/ 5.00H R= 14.2R_E
4 - 1976/ 52/ 6.50H R= 17.0R_E	14 - 1976/ 53/ 7.33H R= 15.9R_E
5 - 1976/ 52/ 8.17H R= 16.0R_E	15 - 1976/ 53/ 10.00H R= 17.5R_E
6 - 1976/ 52/ 10.17H R= 10.4R_E	16 - 1976/ 53/ 15.47H R= 19.6R_E
7 - 1976/ 52/ 19.17H R= 2.3R_E	17 - 1976/ 53/ 17.47H R= 20.0R_E
8 - 1976/ 52/ 19.92H R= 1.7R_E	18 - 1976/ 53/ 20.47H R= 20.3R_E
9 - 1976/ 52/ 20.43H R= 2.6R_E	19 - 1976/ 54/ 1.17H R= 20.0R_E
10 - 1976/ 52/ 21.18H R= 4.2R_E	20 - 1976/ 54/ 2.67H R= 19.7R_E

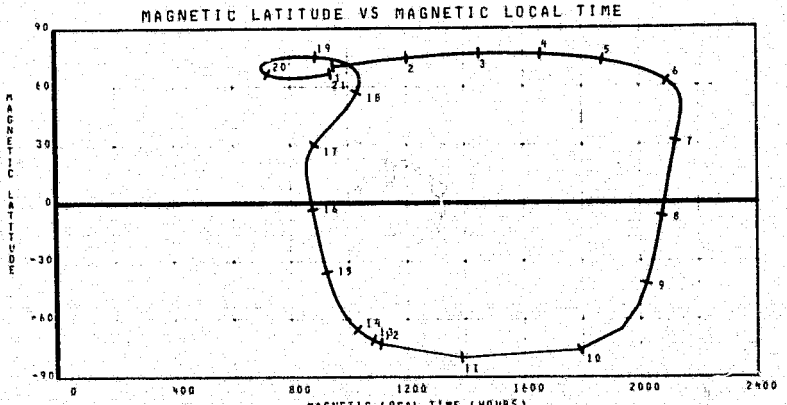
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 52/ 2.00H TO 1976/ 54/ 3.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

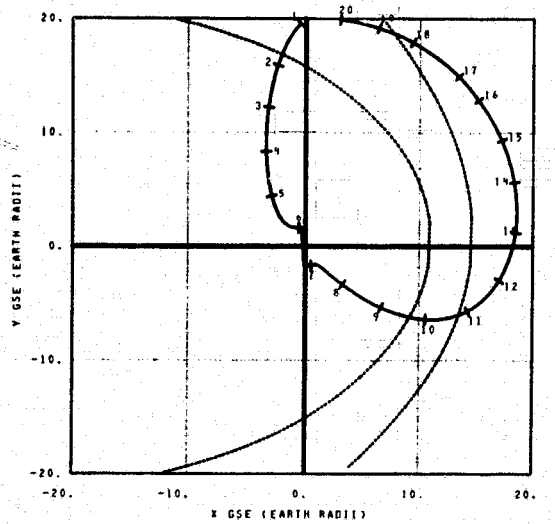
1 - 1976/ 52/ 2.50H R= 10.8R_E	8 - 1976/ 52/ 19.25H R= 2.3R_E	15 - 1976/ 52/ 20.92H R= 2.5R_E
2 - 1976/ 52/ 3.50H R= 17.5R_E	9 - 1976/ 52/ 19.58H R= 1.8R_E	16 - 1976/ 52/ 21.25H R= 4.3R_E
3 - 1976/ 52/ 7.50H R= 16.4R_E	10 - 1976/ 52/ 19.83H R= 1.7R_E	17 - 1976/ 53/ 2.17H R= 11.5R_E
4 - 1976/ 52/ 9.00H R= 15.4R_E	11 - 1976/ 52/ 19.92H R= 1.7R_E	18 - 1976/ 53/ 8.67H R= 16.8R_E
5 - 1976/ 52/ 10.83H R= 14.0R_E	12 - 1976/ 52/ 20.00H R= 1.8R_E	19 - 1976/ 53/ 14.17H R= 19.3R_E
6 - 1976/ 52/ 14.33H R= 10.4R_E	13 - 1976/ 52/ 20.02H R= 1.8R_E	20 - 1976/ 53/ 20.47H R= 20.3R_E
7 - 1976/ 52/ 18.33H R= 4.3R_E	14 - 1976/ 52/ 20.07H R= 1.9R_E	21 - 1976/ 54/ 2.67H R= 19.7R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 52 / 2.00H TO1976/ 54 / 3.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 54/	3.17H	LAT=	76.1	11 - 1976/ 55/	9.67H	LAT=	72.8
2 - 1976/ 54/	11.17H	LAT=	66.3	12 - 1976/ 55/	12.83H	LAT=	77.2
3 - 1976/ 54/	15.50H	LAT=	57.3	13 - 1976/ 55/	15.50H	LAT=	79.8
4 - 1976/ 54/	18.67H	LAT=	45.3	14 - 1976/ 55/	17.50H	LAT=	81.0
5 - 1976/ 54/	21.00H	LAT=	29.3	15 - 1976/ 55/	19.00H	LAT=	81.4
6 - 1976/ 54/	22.83H	LAT=	-67.6	16 - 1976/ 55/	20.50H	LAT=	81.7
7 - 1976/ 54/	23.00H	LAT=	-70.6	17 - 1976/ 55/	21.50H	LAT=	81.6
8 - 1976/ 55/	0.67H	LAT=	27.6	18 - 1976/ 55/	23.50H	LAT=	81.1
9 - 1976/ 55/	3.00H	LAT=	52.5	19 - 1976/ 56/	1.00H	LAT=	80.3
10 - 1976/ 55/	6.17H	LAT=	65.3	20 - 1976/ 56/	3.00H	LAT=	79.0

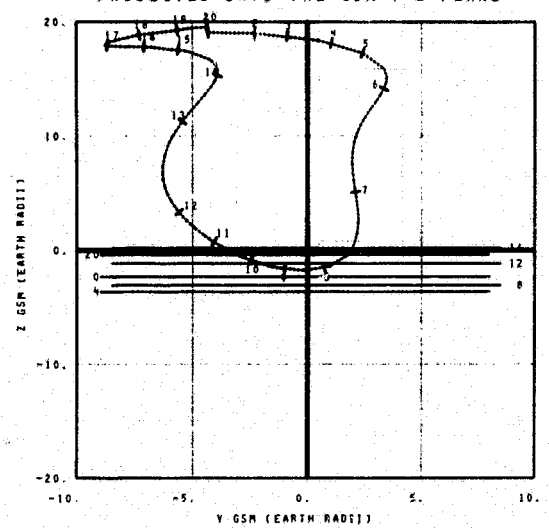
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 54/ 3.00H TO 1976/ 56/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 54/	3.17H	R=	19.4R_E	11 - 1976/ 55/	6.92H	R=	5.2R_E
2 - 1976/ 54/	9.67H	R=	19.2R_E	12 - 1976/ 55/	2.33H	R=	7.6R_E
3 - 1976/ 54/	9.67H	R=	18.8R_E	13 - 1976/ 55/	7.17H	R=	13.3R_E
4 - 1976/ 54/	7.17H	R=	18.2R_E	14 - 1976/ 55/	11.17H	R=	16.3R_E
5 - 1976/ 54/	8.67H	R=	17.5R_E	15 - 1976/ 55/	16.00H	R=	18.7R_E
6 - 1976/ 54/	13.00H	R=	19.8R_E	16 - 1976/ 55/	18.00H	R=	19.4R_E
7 - 1976/ 54/	20.92H	R=	6.4R_E	17 - 1976/ 55/	21.00H	R=	20.0R_E
8 - 1976/ 54/	23.00H	R=	1.7R_E	18 - 1976/ 56/	1.50H	R=	20.2R_E
9 - 1976/ 54/	23.50H	R=	2.3R_E	19 - 1976/ 56/	3.00H	R=	20.1R_E
10 - 1976/ 55/	0.83H	R=	3.9R_E	20 - 1976/ 56/	4.00H	R=	20.0R_E

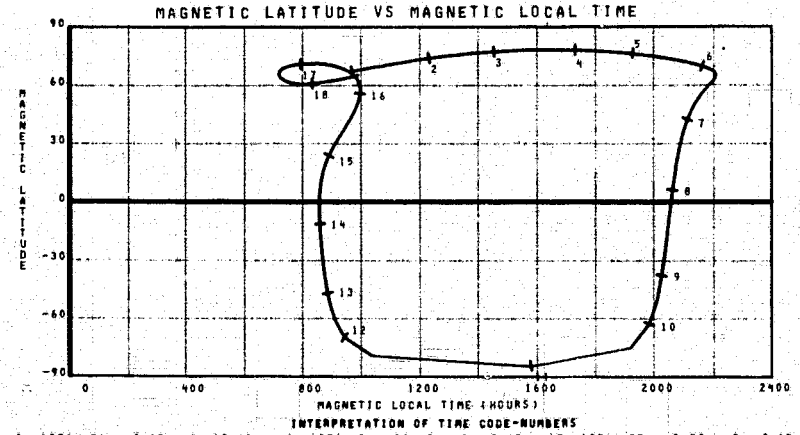
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 54/ 3.00H TO 1976/ 56/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

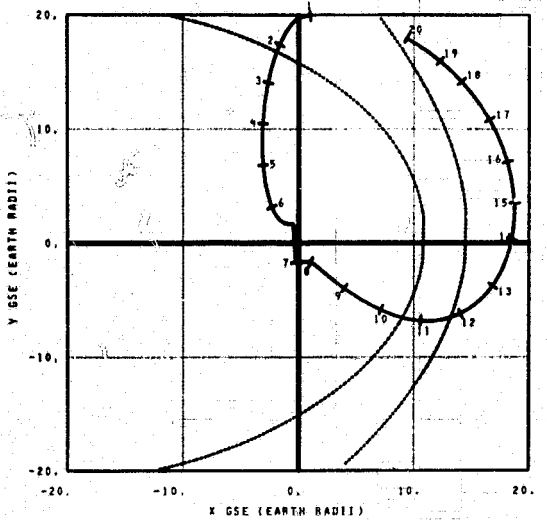
1 - 1976/ 54/	3.17H	R=	19.4R_E	8 - 1976/ 54/	22.42H	R=	2.4R_E
2 - 1976/ 54/	4.67H	R=	18.8R_E	9 - 1976/ 54/	22.83H	R=	1.0R_E
3 - 1976/ 54/	6.67H	R=	17.5R_E	10 - 1976/ 54/	23.00H	R=	1.7R_E
4 - 1976/ 54/	10.67H	R=	16.4R_E	11 - 1976/ 54/	23.17H	R=	1.8R_E
5 - 1976/ 54/	12.33H	R=	15.3R_E	12 - 1976/ 54/	23.33H	R=	2.0R_E
6 - 1976/ 54/	15.83H	R=	12.3R_E	13 - 1976/ 54/	23.50H	R=	2.4R_E
7 - 1976/ 54/	21.50H	R=	4.4R_E	14 - 1976/ 55/	0.42H	R=	4.2R_E
				15 - 1976/ 55/	3.50H	R=	9.4R_E
				16 - 1976/ 55/	9.50H	R=	19.2R_E
				17 - 1976/ 55/	15.50H	R=	18.9R_E
				18 - 1976/ 56/	0.50H	R=	20.3R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 54 / 3.00H TO1976/ 56 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 56/	4.50 H	LAT=	77.8	11 - 1976/ 57/	9.67 H	LAT=	65.9
2 - 1976/ 56/	12.00 H	LAT=	69.8	12 - 1976/ 57/	13.00 H	LAT=	72.9
3 - 1976/ 56/	16.83 H	LAT=	61.8	13 - 1976/ 57/	16.00 H	LAT=	77.1
4 - 1976/ 56/	20.33 H	LAT=	52.2	14 - 1576/ 57/	18.67 H	LAT=	79.7
5 - 1976/ 56/	22.92 H	LAT=	38.4	15 - 1976/ 57/	20.17 H	LAT=	80.7
6 - 1976/ 57/	0.92 H	LAT=	9.4	16 - 1976/ 57/	21.67 H	LAT=	81.4
7 - 1976/ 57/	2.17 H	LAT=	-81.1	17 - 1976/ 57/	23.17 H	LAT=	81.7
8 - 1976/ 57/	2.52 H	LAT=	-91.0	18 - 1976/ 58/	0.67 H	LAT=	81.7
9 - 1976/ 57/	4.33 H	LAT=	35.1	19 - 1976/ 58/	1.67 H	LAT=	81.9
10 - 1976/ 57/	6.67 H	LAT=	54.9	20 - 1976/ 58/	3.17 H	LAT=	80.9

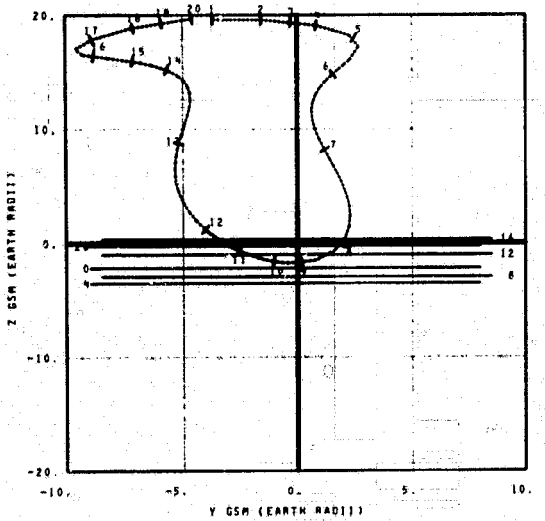
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 56/ 4.50H TO 1976/ 58/ 3.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 56/	4.50 H	R=	20.0 R_E	11 - 1976/ 57/	3.25 H	R=	3.9 R_E
2 - 1976/ 56/	6.00 H	R=	19.7 R_E	12 - 1976/ 57/	4.13 H	R=	5.2 R_E
3 - 1976/ 56/	7.00 H	R=	19.4 R_E	13 - 1976/ 57/	6.17 H	R=	11.0 R_E
4 - 1976/ 56/	8.00 H	R=	19.1 R_E	14 - 1976/ 57/	15.30 H	R=	16.7 R_E
5 - 1976/ 56/	10.50 H	R=	18.2 R_E	15 - 1976/ 57/	17.17 H	R=	17.0 R_E
6 - 1976/ 56/	15.83 H	R=	15.1 R_E	16 - 1976/ 57/	19.67 H	R=	18.9 R_E
7 - 1976/ 56/	22.00 H	R=	8.9 R_E	17 - 1976/ 58/	0.67 H	R=	20.1 R_E
8 - 1976/ 57/	1.67 H	R=	2.4 R_E	18 - 1976/ 58/	2.67 H	R=	20.2 R_E
9 - 1976/ 57/	2.33 H	R=	1.7 R_E	19 - 1976/ 58/	3.67 H	R=	20.3 R_E
10 - 1976/ 57/	2.60 H	R=	2.2 R_E	20 - 1976/ 58/	4.67 H	R=	20.3 R_E

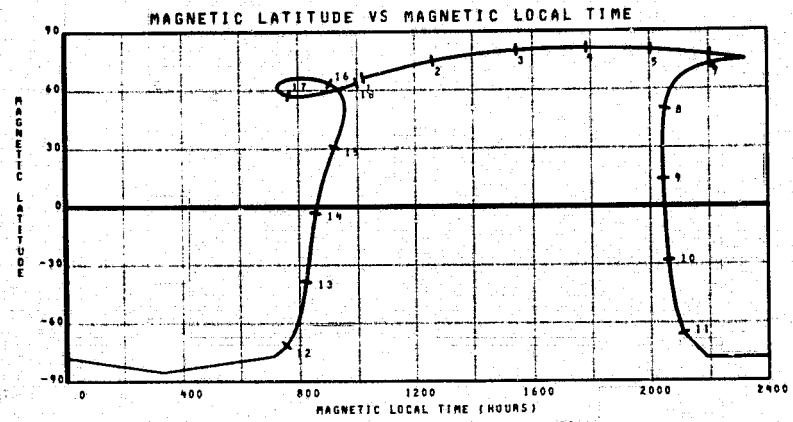
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1975/ 56/ 4.00H TO 1976/ 58/ 5.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

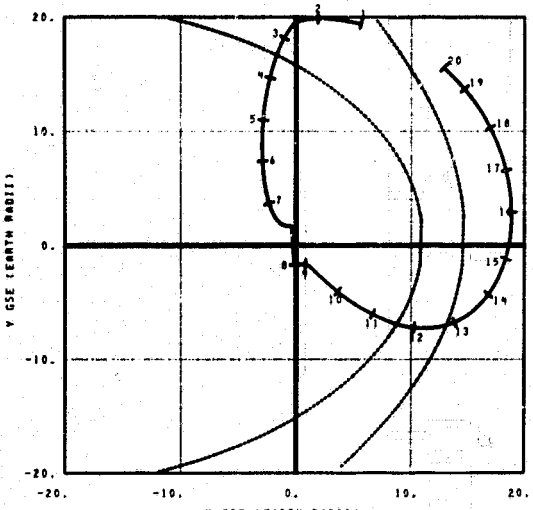
1 - 1976/ 56/	4.50 H	R=	20.0 R_E	8 - 1976/ 57/	0.67 H	R=	9.5 R_E	15 - 1976/ 57/	6.75 H	R=	9.3 R_E
2 - 1976/ 56/	8.00 H	R=	19.1 R_E	9 - 1976/ 57/	1.98 H	R=	2.5 R_E	16 - 1976/ 57/	12.83 H	R=	15.3 R_E
3 - 1976/ 56/	10.50 H	R=	18.2 R_E	10 - 1976/ 57/	2.00 H	R=	1.8 R_E	17 - 1976/ 57/	22.17 H	R=	19.6 R_E
4 - 1976/ 56/	12.00 H	R=	17.5 R_E	11 - 1976/ 57/	2.25 H	R=	1.7 R_E	18 - 1976/ 58/	4.67 H	R=	[illegible]
5 - 1976/ 56/	13.50 H	R=	16.7 R_E	12 - 1976/ 57/	2.53 H	R=	2.0 R_E				
6 - 1976/ 56/	15.67 H	R=	15.2 R_E	13 - 1976/ 57/	2.93 H	R=	2.7 R_E				
7 - 1976/ 56/	22.17 H	R=	8.6 R_E	14 - 1976/ 57/	3.92 H	R=	4.0 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 56 / 4.00H TO1976/ 58 / 5.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 58/	5.17H	LAT=	79.8	11 - 1976/ 59/	9.75H	LAT=	59.1
2 - 1976/ 58/	7.67H	LAT=	77.9	12 - 1976/ 59/	12.83H	LAT=	45.7
3 - 1976/ 58/	13.67H	LAT=	71.9	13 - 1976/ 59/	16.17H	LAT=	72.8
4 - 1976/ 58/	19.33H	LAT=	63.2	14 - 1976/ 59/	19.33H	LAT=	77.2
5 - 1976/ 58/	23.17H	LAT=	53.7	15 - 1976/ 59/	21.50H	LAT=	79.3
6 - 1976/ 59/	1.83H	LAT=	90.9	16 - 1976/ 59/	23.50H	LAT=	88.7
7 - 1976/ 59/	3.92H	LAT=	15.2	17 - 1976/ 60/	1.00H	LAT=	81.9
8 - 1976/ 59/	5.92H	LAT=	-81.9	18 - 1976/ 60/	2.50H	LAT=	81.7
9 - 1976/ 59/	5.67H	LAT=	-58.2	19 - 1976/ 60/	4.00H	LAT=	81.6
10 - 1976/ 59/	7.50H	LAT=	34.3	20 - 1976/ 60/	5.00H	LAT=	81.4

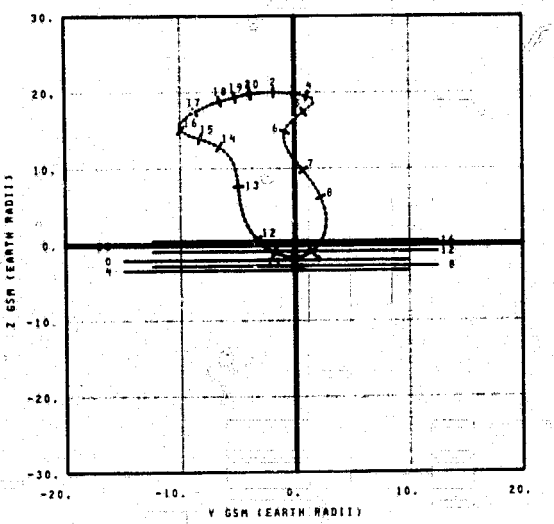
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 58/ 5.00H TO 1976/ 60/ 6.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 58/	5.17H	R=	20.2RE	11 - 1976/ 59/	6.00H	R=	2.6RE
2 - 1976/ 58/	6.67H	R=	20.1RE	12 - 1976/ 59/	6.83H	R=	4.2RE
3 - 1976/ 58/	8.17H	R=	19.9RE	13 - 1976/ 59/	10.50H	R=	10.0RE
4 - 1976/ 58/	9.67H	R=	19.6RE	14 - 1976/ 59/	15.67H	R=	15.6RE
5 - 1976/ 58/	15.17H	R=	17.5RE	15 - 1976/ 59/	18.17H	R=	16.7RE
6 - 1976/ 58/	19.17H	R=	15.0RE	16 - 1976/ 59/	21.50H	R=	18.3RE
7 - 1976/ 59/	0.17H	R=	10.2RE	17 - 1976/ 60/	2.00H	R=	19.7RE
8 - 1976/ 59/	2.33H	R=	7.2RE	18 - 1976/ 60/	4.00H	R=	20.1RE
9 - 1976/ 59/	5.00H	R=	2.0RE	19 - 1976/ 60/	5.00H	R=	20.2RE
10 - 1976/ 59/	5.50H	R=	1.8RE	20 - 1976/ 60/	6.00H	R=	20.2RE

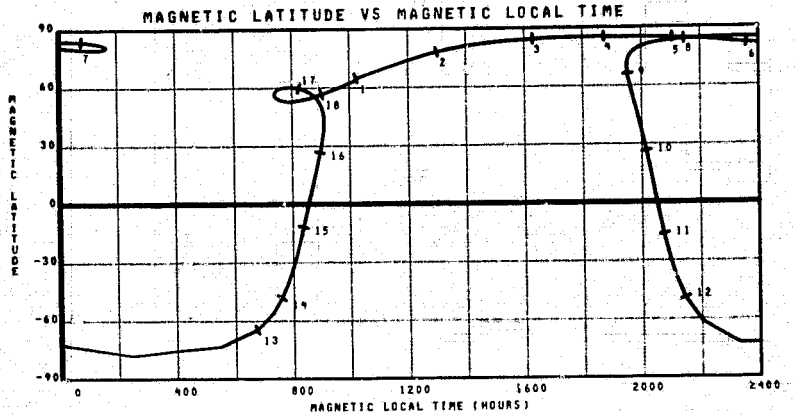
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 58/ 5.00H TO 1976/ 60/ 6.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

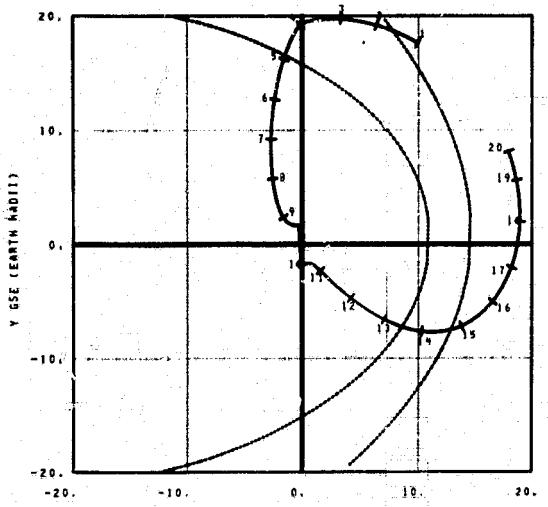
1 - 1976/ 58/	5.17H	R=	20.2RE	8 - 1976/ 59/	0.17H	R=	10.2RE	15 - 1976/ 59/	6.59H	R=	3.6RE
2 - 1976/ 58/	9.67H	R=	19.6RE	9 - 1976/ 59/	2.75H	R=	6.5RE	16 - 1976/ 59/	8.50H	R=	7.2RE
3 - 1976/ 58/	12.17H	R=	16.8RE	10 - 1976/ 59/	4.50H	R=	3.2RE	17 - 1976/ 59/	19.50H	R=	14.1RE
4 - 1976/ 58/	13.17H	R=	15.4RE	11 - 1976/ 59/	5.08H	R=	2.0RE	18 - 1976/ 60/	3.00H	R=	19.9RE
5 - 1976/ 58/	14.17H	R=	13.9RE	12 - 1976/ 59/	5.33H	R=	1.7RE				
6 - 1976/ 58/	16.17H	R=	11.0RE	13 - 1976/ 59/	5.75H	R=	2.0RE				
7 - 1976/ 58/	22.67H	R=	11.9RE	14 - 1976/ 59/	5.92H	R=	2.2RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 58 / 5.00H TO1976/ 60 / 6.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 60/	6.50 H	LAT=	80.9	11 - 1976/ 61/	9.30 H	LAT=	-9.8
2 - 1976/ 60/	8.50 H	LAT=	79.7	12 - 1976/ 61/	11.17 H	LAT=	90.1
3 - 1976/ 60/	10.50 H	LAT=	78.3	13 - 1976/ 61/	13.42 H	LAT=	56.3
4 - 1976/ 60/	14.00 H	LAT=	75.1	14 - 1976/ 61/	16.33 H	LAT=	66.9
5 - 1976/ 60/	20.50 H	LAT=	67.0	15 - 1976/ 61/	19.67 H	LAT=	73.2
6 - 1976/ 61/	0.83 H	LAT=	58.3	16 - 1976/ 61/	22.50 H	LAT=	77.1
7 - 1976/ 61/	3.83 H	LAT=	48.0	17 - 1976/ 62/	0.67 H	LAT=	79.2
8 - 1976/ 61/	6.00 H	LAT=	38.3	18 - 1976/ 62/	2.67 H	LAT=	80.7
9 - 1976/ 61/	7.83 H	LAT=	-9.0	19 - 1976/ 62/	4.17 H	LAT=	81.3
10 - 1976/ 61/	8.67 H	LAT=	-79.1	20 - 1976/ 62/	5.17 H	LAT=	81.6

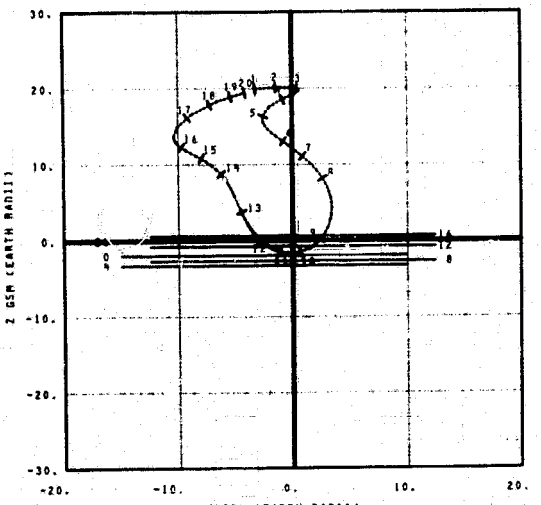
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 60/ 6.00H TO 1976/ 62/ 7.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 60/	6.50 H	R=	20.3 R_E	11 - 1976/ 61/	9.00 H	R=	2.0 R_E
2 - 1976/ 60/	8.00 H	R=	20.2 R_E	12 - 1976/ 61/	9.65 H	R=	3.3 R_E
3 - 1976/ 60/	10.50 H	R=	20.0 R_E	13 - 1976/ 61/	11.42 H	R=	6.7 R_E
4 - 1976/ 60/	16.00 H	R=	18.6 R_E	14 - 1976/ 61/	15.00 H	R=	11.9 R_E
5 - 1976/ 60/	20.00 H	R=	16.6 R_E	15 - 1976/ 61/	17.67 H	R=	14.0 R_E
6 - 1976/ 61/	0.50 H	R=	13.3 R_E	16 - 1976/ 61/	20.50 H	R=	16.1 R_E
7 - 1976/ 61/	2.33 H	R=	11.4 R_E	17 - 1976/ 62/	2.17 H	R=	18.9 R_E
8 - 1976/ 61/	4.33 H	R=	9.0 R_E	18 - 1976/ 62/	4.17 H	R=	19.5 R_E
9 - 1976/ 61/	7.83 H	R=	2.9 R_E	19 - 1976/ 62/	5.67 H	R=	19.8 R_E
10 - 1976/ 61/	8.50 H	R=	1.0 R_E	20 - 1976/ 62/	6.67 H	R=	20.0 R_E

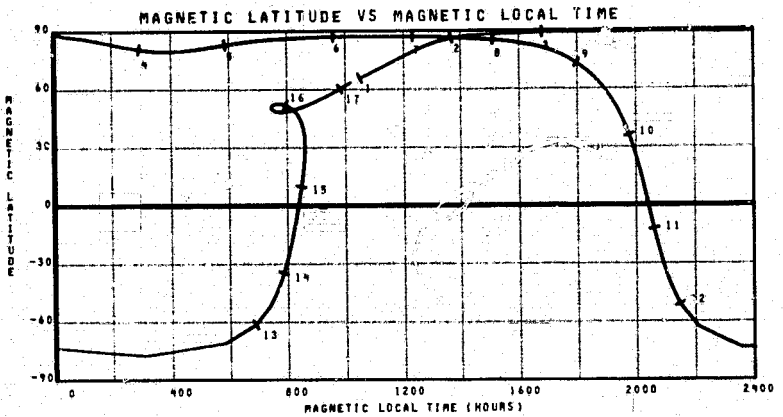
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 60/ 6.00H TO 1976/ 62/ 7.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

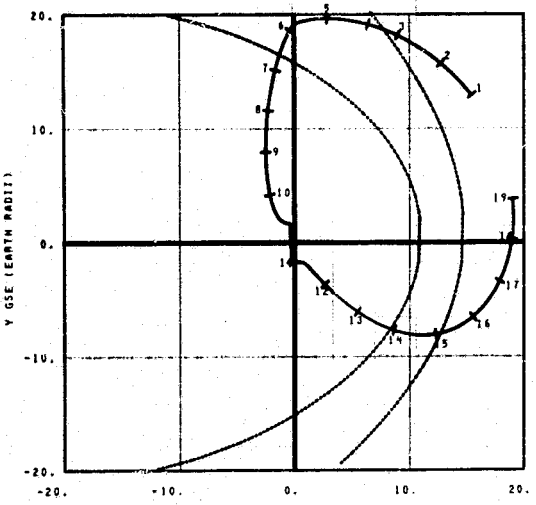
1 - 1976/ 60/	6.50 H	R=	20.3 R_E	8 - 1976/ 61/	4.17 H	R=	11.6 R_E	15 - 1976/ 61/	19.17 H	R=	9.9 R_E
2 - 1976/ 60/	18.50 H	R=	19.6 R_E	9 - 1976/ 61/	4.33 H	R=	9.0 R_E	16 - 1976/ 61/	19.33 H	R=	11.8 R_E
3 - 1976/ 60/	13.50 H	R=	19.4 R_E	10 - 1976/ 61/	7.17 H	R=	4.3 R_E	17 - 1976/ 62/	5.67 H	R=	19.8 R_E
4 - 1976/ 60/	15.00 H	R=	17.7 R_E	11 - 1976/ 61/	8.17 H	R=	2.2 R_E				
5 - 1976/ 60/	23.17 H	R=	14.4 R_E	12 - 1976/ 61/	8.50 H	R=	1.0 R_E				
6 - 1976/ 61/	1.00 H	R=	12.8 R_E	13 - 1976/ 61/	8.92 H	R=	1.9 R_E				
7 - 1976/ 61/	1.50 H	R=	12.3 R_E	14 - 1976/ 61/	9.18 H	R=	2.3 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 60 / 6.00H TO1976/ 62 / 7.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 62/ 7.17H	LAT= 81.6	11 - 1976/ 63/ 11.83H	LAT= -81.7
2 - 1976/ 62/ 9.67H	LAT= 81.3	12 - 1976/ 63/ 13.93H	LAT= 25.2
3 - 1976/ 62/ 10.67H	LAT= 80.4	13 - 1976/ 63/ 15.50H	LAT= 50.4
4 - 1976/ 62/ 12.17H	LAT= 79.5	14 - 1976/ 63/ 18.33H	LAT= 62.9
5 - 1976/ 62/ 14.67H	LAT= 77.5	15 - 1976/ 63/ 21.67H	LAT= 71.0
6 - 1976/ 62/ 19.17H	LAT= 73.1	16 - 1976/ 64/ 0.83H	LAT= 78.9
7 - 1976/ 63/ 1.33H	LAT= 64.3	17 - 1976/ 64/ 3.50H	LAT= 78.9
8 - 1976/ 63/ 5.17H	LAT= 59.2	18 - 1976/ 64/ 5.50H	LAT= 80.4
9 - 1976/ 63/ 8.00H	LAT= 42.8	19 - 1976/ 64/ 7.00H	LAT= 81.2
10 - 1976/ 63/ 10.17H	LAT= 19.3		

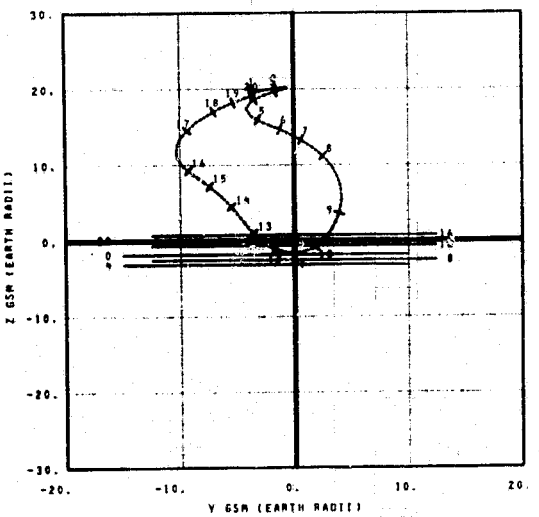
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 62/ 7.00H TO 1976/ 64/ 8.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 62/ 7.17H	R= 20.1R$_E$	11 - 1976/ 63/ 11.92H	R= 1.7R$_E$
2 - 1976/ 62/ 9.17H	R= 20.2R$_E$	12 - 1976/ 63/ 12.92H	R= 2.4R$_E$
3 - 1976/ 62/ 10.17H	R= 19.8R$_E$	13 - 1976/ 63/ 13.48H	R= 4.4R$_E$
4 - 1976/ 62/ 10.17H	R= 19.8R$_E$	14 - 1976/ 63/ 15.92H	R= 7.9R$_E$
5 - 1976/ 62/ 23.67H	R= 14.3R$_E$	15 - 1976/ 63/ 17.33H	R= 11.0R$_E$
6 - 1976/ 63/ 1.83H	R= 14.8R$_E$	16 - 1976/ 63/ 20.50H	R= 13.7R$_E$
7 - 1976/ 63/ 3.50H	R= 13.5R$_E$	17 - 1976/ 64/ 2.50H	R= 17.7R$_E$
8 - 1976/ 63/ 5.33H	R= 11.7R$_E$	18 - 1976/ 64/ 5.00H	R= 18.8R$_E$
9 - 1976/ 63/ 9.50H	R= 5.0R$_E$	19 - 1976/ 64/ 6.50H	R= 19.3R$_E$
10 - 1976/ 63/ 11.33H	R= 2.3R$_E$	20 - 1976/ 64/ 8.00H	R= 19.6R$_E$

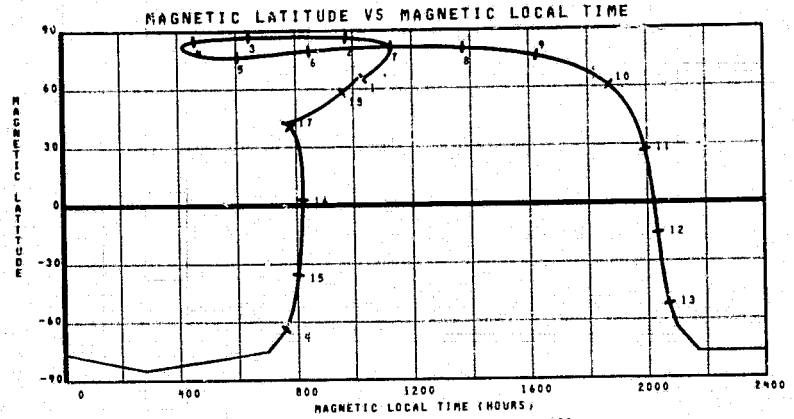
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 62/ 7.00H TO 1976/ 64/ 8.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

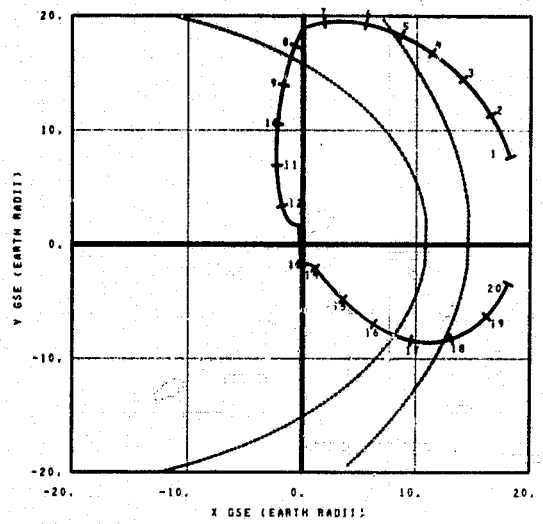
1 - 1976/ 62/ 7.17H	R= 20.1R$_E$	8 - 1976/ 63/ 5.83H	R= 13.2R$_E$	15 - 1976/ 63/ 12.33H	R= 2.2R$_E$
2 - 1976/ 62/ 13.17H	R= 20.1R$_E$	9 - 1976/ 63/ 8.33H	R= 11.7R$_E$	16 - 1976/ 63/ 13.83H	R= 3.6R$_E$
3 - 1976/ 62/ 19.17H	R= 19.9R$_E$	10 - 1976/ 63/ 8.00H	R= 8.4R$_E$	17 - 1976/ 63/ 16.33H	R= 9.8R$_E$
4 - 1976/ 62/ 15.17H	R= 19.8R$_E$	11 - 1976/ 63/ 10.92H	R= 4.5R$_E$	18 - 1976/ 64/ 6.00H	R= 19.1R$_E$
5 - 1976/ 62/ 21.67H	R= 17.4R$_E$	12 - 1976/ 63/ 11.33H	R= 2.3R$_E$		
6 - 1976/ 63/ 0.83H	R= 15.6R$_E$	13 - 1976/ 63/ 11.67H	R= 1.8R$_E$		
7 - 1976/ 63/ 2.47H	R= 14.2R$_E$	14 - 1976/ 63/ 12.00H	R= 1.5R$_E$		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 62 / 7.00H TO1976/ 64 / 8.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 64/ 8.50 H	LAT= 81.6	11 - 1976/ 65/ 11.42 H	LAT= 37.8
2 - 1976/ 64/ 10.00 H	LAT= 81.7	12 - 1976/ 65/ 13.03 H	LAT= 8.3
3 - 1976/ 64/ 11.50 H	LAT= 81.9	13 - 1976/ 65/ 15.00 H	LAT= -80.5
4 - 1976/ 64/ 13.00 H	LAT= 80.9	14 - 1976/ 65/ 15.60 H	LAT= -20.1
5 - 1976/ 64/ 14.50 H	LAT= 80.1	15 - 1976/ 65/ 17.42 H	LAT= 37.9
6 - 1976/ 64/ 16.50 H	LAT= 78.7	16 - 1976/ 65/ 19.67 H	LAT= 55.3
7 - 1976/ 64/ 19.50 H	LAT= 76.1	17 - 1976/ 65/ 22.67 H	LAT= 66.0
8 - 1976/ 65/ 1.00 H	LAT= 69.9	18 - 1976/ 66/ 2.00 H	LAT= 72.9
9 - 1976/ 65/ 6.00 H	LAT= 61.9	19 - 1976/ 66/ 5.00 H	LAT= 77.3
10 - 1976/ 65/ 9.33 H	LAT= 52.0	20 - 1976/ 66/ 7.17 H	LAT= 79.2

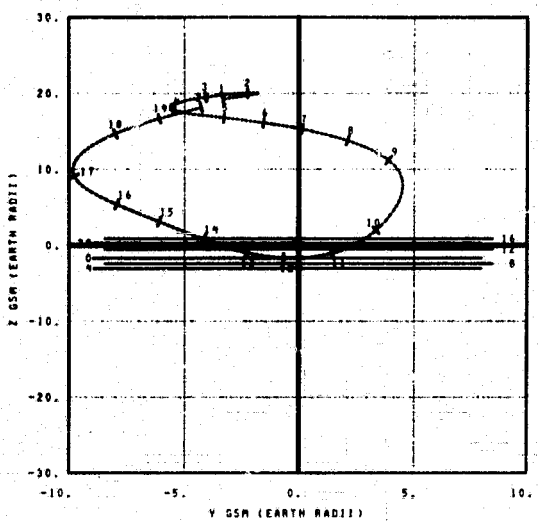
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 64/ 8.00H TO 1976/ 66/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 64/ 8.50 H	R= 19.8 R_E	11 - 1976/ 65/ 14.75 H	R= 2.0 R_E
2 - 1976/ 64/ 14.00 H	R= 20.3 R_E	12 - 1976/ 65/ 15.33 H	R= 1.9 R_E
3 - 1976/ 64/ 17.00 H	R= 20.0 R_E	13 - 1976/ 65/ 15.87 H	R= 2.9 R_E
4 - 1976/ 64/ 22.50 H	R= 18.5 R_E	14 - 1976/ 65/ 16.05 H	R= 4.9 R_E
5 - 1976/ 65/ 1.50 H	R= 17.2 R_E	15 - 1976/ 65/ 18.42 H	R= 7.6 R_E
6 - 1976/ 65/ 3.00 H	R= 16.3 R_E	16 - 1976/ 65/ 20.42 H	R= 10.3 R_E
7 - 1976/ 65/ 4.33 H	R= 15.4 R_E	17 - 1976/ 65/ 24.00 H	R= 13.9 R_E
8 - 1976/ 65/ 6.00 H	R= 14.1 R_E	18 - 1976/ 66/ 4.67 H	R= 17.2 R_E
9 - 1976/ 65/ 8.17 H	R= 12.1 R_E	19 - 1976/ 66/ 6.67 H	R= 18.1 R_E
10 - 1976/ 65/ 13.50 H	R= 4.4 R_E	20 - 1976/ 66/ 8.67 H	R= 18.9 R_E

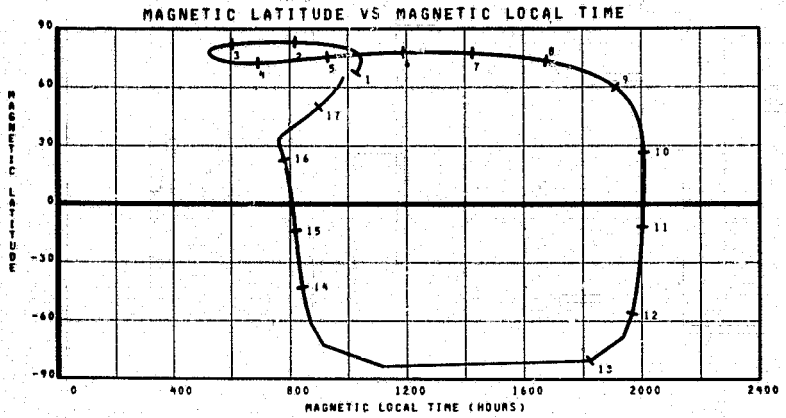
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 64/ 8.00H TO 1976/ 66/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

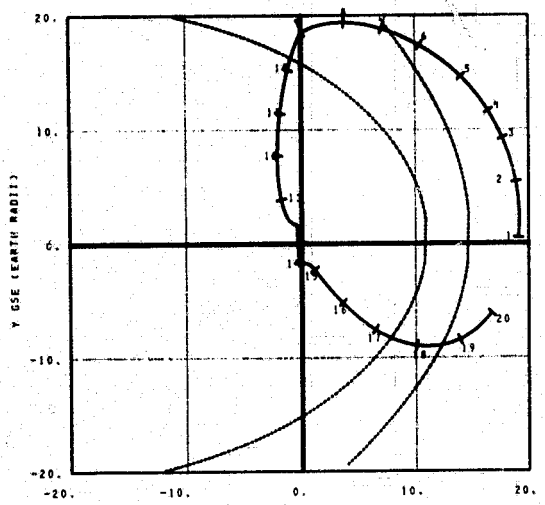
1 - 1976/ 64/ 8.50 H	R= 19.8 R_E	8 - 1976/ 65/ 7.50 H	R= 12.7 R_E	15 - 1976/ 65/ 15.92 H	R= 3.0 R_E
2 - 1976/ 64/ 13.50 H	R= 20.3 R_E	9 - 1976/ 65/ 10.50 H	R= 9.4 R_E	16 - 1976/ 65/ 17.75 H	R= 6.3 R_E
3 - 1976/ 64/ 15.00 H	R= 20.2 R_E	10 - 1976/ 65/ 12.50 H	R= 6.4 R_E	17 - 1976/ 66/ 9.00 H	R= 17.2 R_E
4 - 1976/ 64/ 22.50 H	R= 18.5 R_E	11 - 1976/ 65/ 14.50 H	R= 2.4 R_E		
5 - 1976/ 65/ 2.00 H	R= 16.9 R_E	12 - 1976/ 65/ 14.92 H	R= 1.0 R_E		
6 - 1976/ 65/ 4.17 H	R= 15.3 R_E	13 - 1976/ 65/ 15.08 H	R= 1.7 R_E		
7 - 1976/ 65/ 5.67 H	R= 14.0 R_E	14 - 1976/ 65/ 15.50 H	R= 2.1 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 64 / 8.00H TO1976/ 66 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 66/ 9.17H	LAT= 80.6	11 - 1976/ 67/ 11.83H	LAT= 94.6
2 - 1976/ 66/ 11.17H	LAT= 81.5	12 - 1976/ 67/ 14.67H	LAT= 91.9
3 - 1976/ 66/ 12.67H	LAT= 81.7	13 - 1976/ 67/ 16.83H	LAT= 14.2
4 - 1976/ 66/ 13.67H	LAT= 81.6	14 - 1976/ 67/ 18.25H	LAT= -81.1
5 - 1976/ 66/ 15.17H	LAT= 81.3	15 - 1976/ 67/ 18.92H	LAT= -12.9
6 - 1976/ 66/ 17.17H	LAT= 80.9	16 - 1976/ 67/ 20.83H	LAT= 98.2
7 - 1976/ 66/ 19.17H	LAT= 79.1	17 - 1976/ 67/ 23.33H	LAT= 97.9
8 - 1976/ 66/ 21.67H	LAT= 77.1	18 - 1976/ 68/ 2.67H	LAT= 87.9
9 - 1976/ 67/ 1.67H	LAT= 73.1	19 - 1976/ 68/ 6.17H	LAT= 79.3
10 - 1976/ 67/ 7.67H	LAT= 64.6	20 - 1976/ 68/ 9.00H	LAT= 77.9

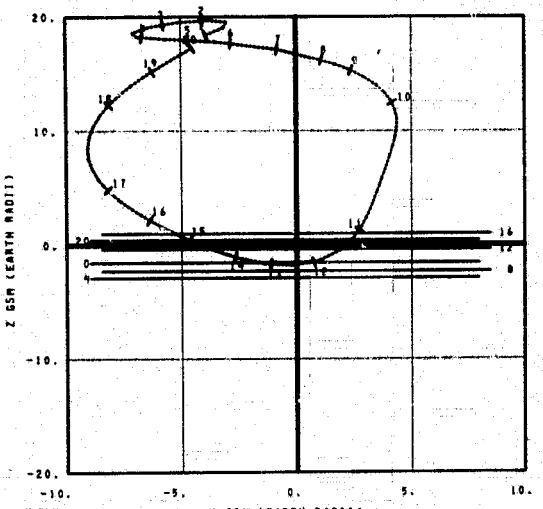
TIME AS YEAR/DAY/HOUR

LAT IS SSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 66/ 9.00H TO 1976/ 68/10.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 66/ 9.17H	R= 19.1RE	11 - 1976/ 67/ 17.25H	R= 3.4RE
2 - 1976/ 66/ 15.17H	R= 20.2RE	12 - 1976/ 67/ 18.25H	R= 1.7RE
3 - 1976/ 66/ 17.67H	R= 20.2RE	13 - 1976/ 67/ 18.75H	R= 2.2RE
4 - 1976/ 66/ 23.17H	R= 19.9RE	14 - 1976/ 67/ 19.20H	R= 3.3RE
5 - 1976/ 67/ 1.67H	R= 18.6RE	15 - 1976/ 67/ 20.25H	R= 7.2RE
6 - 1976/ 67/ 3.17H	R= 17.9RE	16 - 1976/ 67/ 21.58H	R= 7.4RE
7 - 1976/ 67/ 4.67H	R= 17.2RE	17 - 1976/ 67/ 23.58H	R= 10.1RE
8 - 1976/ 67/ 6.17H	R= 16.3RE	18 - 1976/ 68/ 4.83H	R= 15.2RE
9 - 1976/ 67/ 7.33H	R= 15.9RE	19 - 1976/ 68/ 7.33H	R= 16.0RE
10 - 1976/ 67/ 10.17H	R= 13.2RE	20 - 1976/ 68/ 10.00H	R= 10.2RE

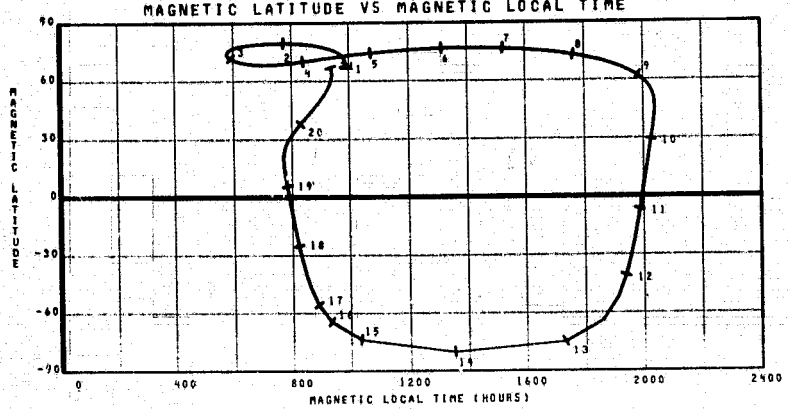
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 66/ 9.00H TO 1976/ 68/10.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

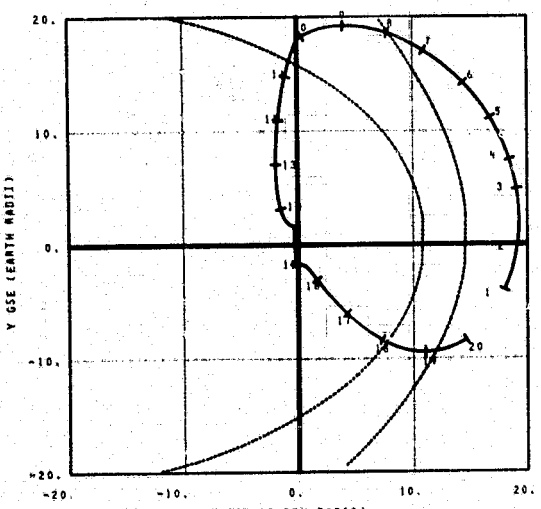
1 - 1976/ 66/ 9.17H	R= 19.1RE	8 - 1976/ 67/ 9.67H	R= 13.7RE	15 - 1976/ 67/ 18.58H	R= 1.9RE
2 - 1976/ 66/ 11.67H	R= 20.1RE	9 - 1976/ 67/ 11.00H	R= 10.2RE	16 - 1976/ 67/ 18.67H	R= 2.0RE
3 - 1976/ 66/ 13.67H	R= 20.2RE	10 - 1976/ 67/ 14.92H	R= 4.1RE	17 - 1976/ 67/ 18.67H	R= 2.0RE
4 - 1976/ 67/ 1.17H	R= 18.8RE	11 - 1976/ 67/ 17.75H	R= 2.5RE	18 - 1976/ 67/ 19.08H	R= 2.9RE
5 - 1976/ 67/ 3.17H	R= 17.9RE	12 - 1976/ 67/ 18.08H	R= 1.8RE	19 - 1976/ 67/ 20.83H	R= 5.2RE
6 - 1976/ 67/ 5.17H	R= 16.3RE	13 - 1976/ 67/ 18.33H	R= 1.7RE	20 - 1976/ 68/ 3.08H	R= 13.8RE
7 - 1976/ 67/ 7.67H	R= 13.3RE	14 - 1976/ 67/ 18.92H	R= 1.7RE	21 - 1976/ 68/ 10.00H	R= 10.2RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 66 / 9.00H TO1976/ 68 /10.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 68/ 10.50 H	LAT=	79.3	11 - 1976/ 69/ 11.50 H	LAT=	63.5
2 - 1976/ 68/ 12.50 H	LAT=	80.7	12 - 1976/ 69/ 15.50 H	LAT=	53.1
3 - 1976/ 68/ 14.50 H	LAT=	81.5	13 - 1976/ 69/ 18.33 H	LAT=	30.1
4 - 1976/ 68/ 15.50 H	LAT=	81.7	14 - 1976/ 69/ 20.42 H	LAT=	3.5
5 - 1976/ 68/ 17.00 H	LAT=	81.4	15 - 1976/ 69/ 21.50 H	LAT=	-81.5
6 - 1976/ 68/ 18.50 H	LAT=	81.3	16 - 1976/ 69/ 22.97 H	LAT=	10.1
7 - 1976/ 68/ 20.50 H	LAT=	80.9	17 - 1976/ 70/ 0.67 H	LAT=	46.1
8 - 1976/ 68/ 22.50 H	LAT=	79.1	18 - 1976/ 70/ 3.50 H	LAT=	61.1
9 - 1976/ 69/ 1.50 H	LAT=	76.6	19 - 1976/ 70/ 7.17 H	LAT=	70.5
10 - 1976/ 69/ 5.50 H	LAT=	72.5	20 - 1976/ 70/ 10.50 H	LAT=	75.0

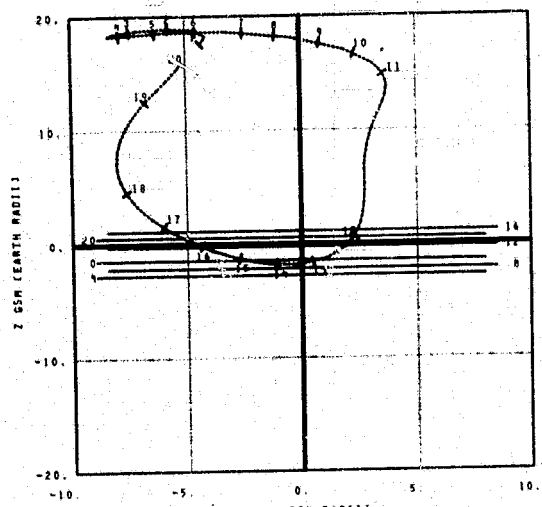
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 68/10.00H TO 1976/ 70/11.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 68/ 10.50 H	R= 18.9RE	11 - 1976/ 69/ 10.83 H	R= 15.3RE
2 - 1976/ 68/ 16.00 H	R= 20.0RE	12 - 1976/ 69/ 20.83 H	R= 2.6RE
3 - 1976/ 68/ 18.50 H	R= 20.2RE	13 - 1976/ 69/ 21.50 H	R= 1.7RE
4 - 1976/ 68/ 23.50 H	R= 20.0RE	14 - 1976/ 69/ 22.00 H	R= 2.3RE
5 - 1976/ 69/ 1.50 H	R= 19.6RE	15 - 1976/ 69/ 22.52 H	R= 3.3RE
6 - 1976/ 69/ 3.00 H	R= 19.2RE	16 - 1976/ 69/ 23.25 H	R= 4.8RE
7 - 1976/ 69/ 4.50 H	R= 18.7RE	17 - 1976/ 70/ 0.33 H	R= 6.8RE
8 - 1976/ 69/ 5.50 H	R= 18.3RE	18 - 1976/ 70/ 2.17 H	R= 9.9RE
9 - 1976/ 69/ 7.00 H	R= 17.6RE	19 - 1976/ 70/ 7.33 H	R= 14.7RE
10 - 1976/ 69/ 8.50 H	R= 16.8RE	20 - 1976/ 70/ 11.00 H	R= 17.1RE

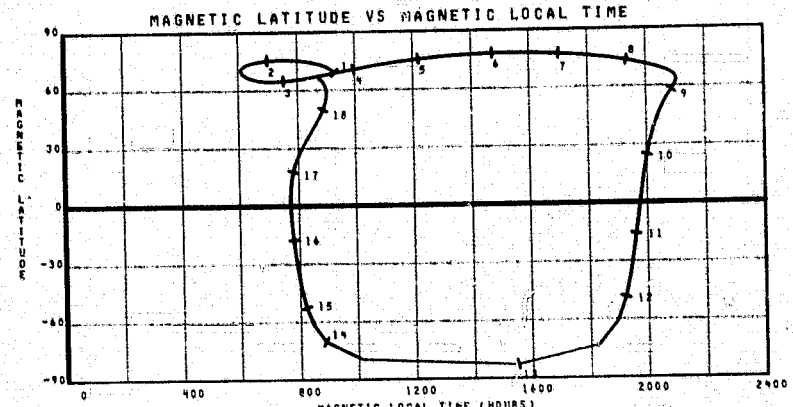
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 68/10.00H TO 1976/ 70/11.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

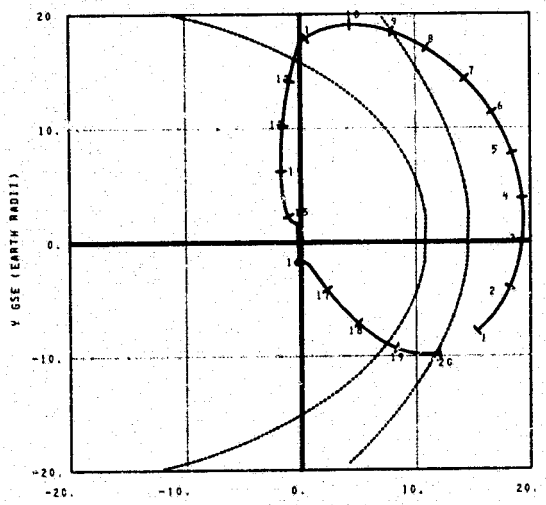
1 - 1976/ 68/ 10.50 H R= 18.9RE	8 - 1976/ 69/ 12.50 H R= 14.0RE	15 - 1976/ 69/ 22.02 H R= 2.3RE
2 - 1976/ 68/ 14.50 H R= 19.7RE	9 - 1976/ 69/ 18.50 H R= 7.1RE	16 - 1976/ 69/ 22.70 H R= 3.7RE
3 - 1976/ 68/ 23.50 H R= 20.0RE	10 - 1976/ 69/ 20.50 H R= 3.2RE	17 - 1976/ 70/ 1.33 H R= 8.3RE
4 - 1976/ 69/ 4.00 H R= 18.5RE	11 - 1976/ 69/ 21.17 H R= 2.0RE	18 - 1976/ 70/ 7.17 H R= 14.9RE
5 - 1976/ 69/ 6.50 H R= 17.5RE	12 - 1976/ 69/ 21.42 H R= 1.7RE	
6 - 1976/ 69/ 8.50 H R= 16.8RE	13 - 1976/ 69/ 21.67 H R= 1.0RE	
7 - 1976/ 69/ 10.17 H R= 15.8RE	14 - 1976/ 69/ 21.83 H R= 2.0RE	

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 68/10.00H TO1976/ 70/11.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 70/ 11.17H LAT= 76.6	11 - 1976/ 71/ 9.67H LAT= 71.9	
2 - 1976/ 70/ 14.17H LAT= 79.6	12 - 1976/ 71/ 15.50H LAT= 62.0	
3 - 1976/ 70/ 16.17H LAT= 80.9	13 - 1976/ 71/ 19.33H LAT= 50.9	
4 - 1976/ 70/ 17.67H LAT= 81.5	14 - 1976/ 71/ 22.00H LAT= 53.2	
5 - 1976/ 70/ 19.17H LAT= 81.7	15 - 1976/ 72/ 0.00H LAT= -18.7	
6 - 1976/ 70/ 20.67H LAT= 81.6	16 - 1976/ 72/ 0.75H LAT= -78.9	
7 - 1976/ 70/ 22.17H LAT= 81.2	17 - 1976/ 72/ 2.38H LAT= 24.8	
8 - 1976/ 71/ 0.17H LAT= 80.2	18 - 1976/ 72/ 4.75H LAT= 52.1	
9 - 1976/ 71/ 2.17H LAT= 78.8	19 - 1976/ 72/ 8.00H LAT= 65.0	
10 - 1976/ 71/ 5.17H LAT= 76.3	20 - 1976/ 72/ 11.67H LAT= 72.0	

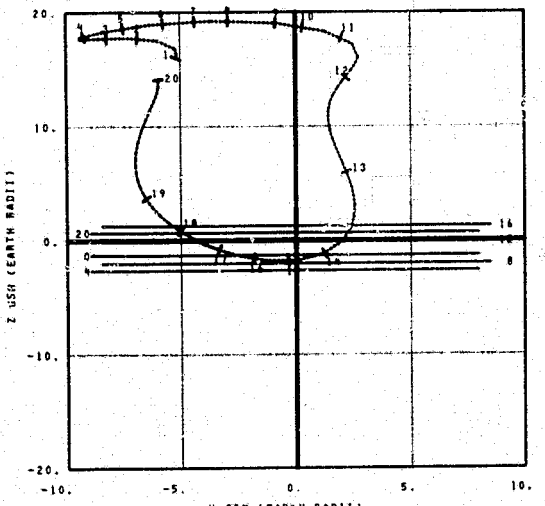
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 70/11.00H TO 1976/ 72/12.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 70/ 11.17H R= 17.2RE	11 - 1976/ 71/ 9.67H R= 17.9RE
2 - 1976/ 70/ 14.17H R= 19.3RE	12 - 1976/ 71/ 15.17H R= 19.5RE
3 - 1976/ 70/ 16.17H R= 19.8RE	13 - 1976/ 71/ 22.00H R= 6.6RE
4 - 1976/ 70/ 23.17H R= 20.3RE	14 - 1976/ 72/ 0.58H R= 1.8RE
5 - 1976/ 71/ 1.17H R= 20.1RE	15 - 1976/ 72/ 1.00H R= 1.9RE
6 - 1976/ 71/ 3.17H R= 19.9RE	16 - 1976/ 72/ 1.42H R= 2.7RE
7 - 1976/ 71/ 4.17H R= 19.7RE	17 - 1976/ 72/ 1.95H R= 3.8RE
8 - 1976/ 71/ 5.17H R= 19.5RE	18 - 1976/ 72/ 2.83H R= 5.5RE
9 - 1976/ 71/ 6.67H R= 19.1RE	19 - 1976/ 72/ 4.33H R= 8.0RE
10 - 1976/ 71/ 7.67H R= 18.7RE	20 - 1976/ 72/ 12.00H R= 15.7RE

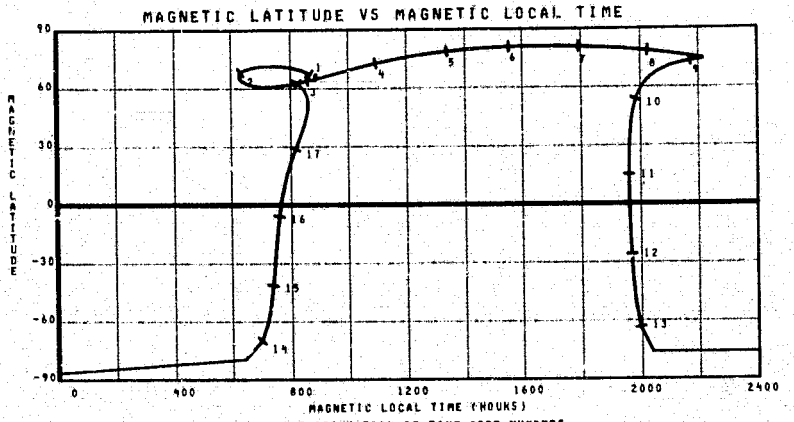
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 70/11.00H TO 1976/ 72/12.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

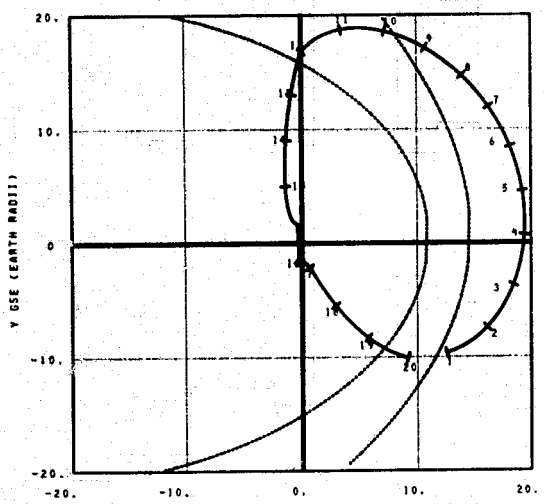
1 - 1976/ 70/ 11.17H R= 17.2RE	8 - 1976/ 71/ 13.67H R= 15.6RE	15 - 1976/ 72/ 1.42H R= 2.7RE
2 - 1976/ 70/ 16.67H R= 19.9RE	9 - 1976/ 71/ 20.00H R= 9.5RE	16 - 1976/ 72/ 2.37H R= 4.6RE
3 - 1976/ 71/ 2.17H R= 20.1RE	10 - 1976/ 71/ 23.50H R= 4.0RE	17 - 1976/ 72/ 5.25H R= 9.3RE
4 - 1976/ 71/ 6.17H R= 19.2RE	11 - 1976/ 72/ 0.08H R= 2.4RE	18 - 1976/ 72/ 11.33H R= 15.3RE
5 - 1976/ 71/ 8.67H R= 18.3RE	12 - 1976/ 72/ 0.58H R= 1.8RE	
6 - 1976/ 71/ 10.17H R= 17.7RE	13 - 1976/ 72/ 0.75H R= 1.7RE	
7 - 1976/ 71/ 11.67H R= 16.9RE	14 - 1976/ 72/ 1.00H R= 2.0RE	

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 70 /11.00H TO1976/ 72 /12.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 72/ 12.17H	LAT= 73.6	11 - 1976/ 73/ 10.00H	LAT= 74.8
2 - 1976/ 72/ 15.50H	LAT= 77.8	12 - 1976/ 73/ 15.00H	LAT= 68.6
3 - 1976/ 72/ 18.00H	LAT= 80.0	13 - 1976/ 73/ 20.00H	LAT= 59.1
4 - 1976/ 72/ 20.00H	LAT= 81.1	14 - 1976/ 73/ 23.50H	LAT= 46.6
5 - 1976/ 72/ 21.50H	LAT= 81.6	15 - 1976/ 74/ 2.00H	LAT= 29.2
6 - 1976/ 72/ 23.00H	LAT= 81.7	16 - 1976/ 74/ 3.92H	LAT= -81.7
7 - 1976/ 73/ 0.50H	LAT= 81.5	17 - 1976/ 74/ 4.92H	LAT= -29.2
8 - 1976/ 73/ 2.00H	LAT= 80.9	18 - 1976/ 74/ 6.42H	LAT= 39.9
9 - 1976/ 73/ 4.00H	LAT= 79.8	19 - 1976/ 74/ 9.00H	LAT= 57.7
10 - 1976/ 73/ 6.50H	LAT= 78.0	20 - 1976/ 74/ 12.50H	LAT= 68.2

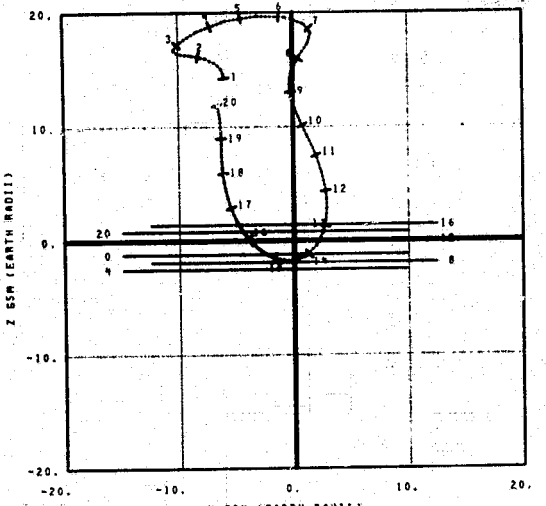
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 72/12.00H TO 1976/ 74/13.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 72/ 12.17H	R= 15.9RE	11 - 1976/ 74/ 0.42H	R= 7.9RE
2 - 1976/ 72/ 17.00H	R= 18.4RE	12 - 1976/ 74/ 1.92H	R= 5.9RE
3 - 1976/ 72/ 23.50H	R= 20.1RE	13 - 1976/ 74/ 3.00H	R= 3.2RE
4 - 1976/ 73/ 3.00H	R= 20.3RE	14 - 1976/ 74/ 3.75H	R= 1.8RE
5 - 1976/ 73/ 5.00H	R= 20.1RE	15 - 1976/ 74/ 4.50H	R= 2.9RE
6 - 1976/ 73/ 7.50H	R= 19.7RE	16 - 1976/ 74/ 5.42H	R= 4.3RE
7 - 1976/ 73/ 11.00H	R= 18.7RE	17 - 1976/ 74/ 6.67H	R= 6.4RE
8 - 1976/ 73/ 16.33H	R= 16.0RE	18 - 1976/ 74/ 8.25H	R= 9.0RE
9 - 1976/ 73/ 20.00H	R= 13.1RE	19 - 1976/ 74/ 10.25H	R= 11.9RE
10 - 1976/ 73/ 22.67H	R= 10.2RE	20 - 1976/ 74/ 13.00H	R= 14.1RE

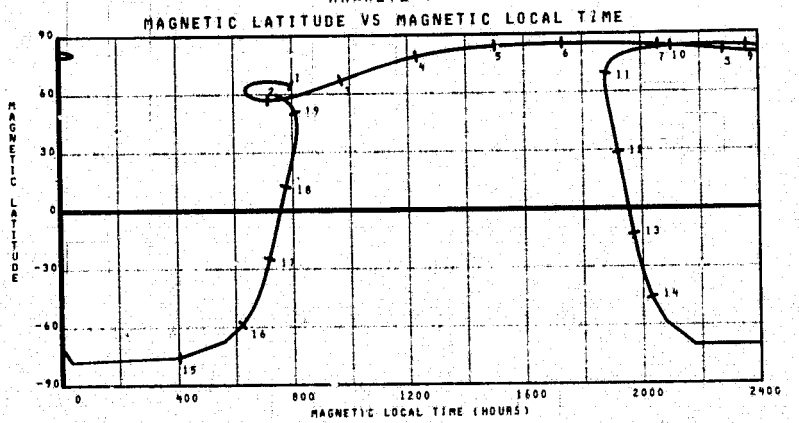
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 72/12.00H TO 1976/ 74/13.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

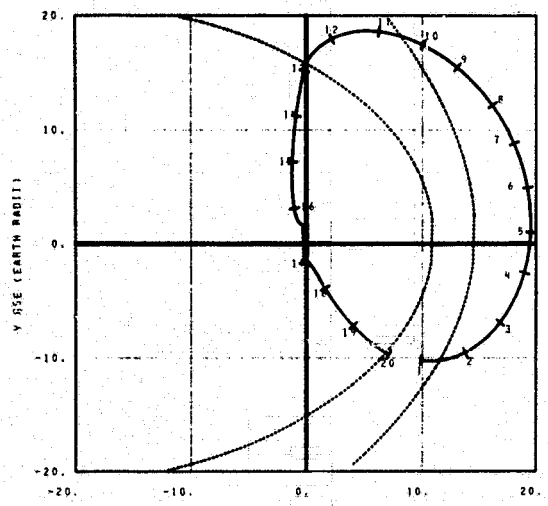
1 - 1976/ 72/ 12.17H	R= 15.9RE	8 - 1976/ 73/ 15.50H	R= 16.5RE	15 - 1976/ 74/ 4.17H	R= 1.8RE
2 - 1976/ 72/ 22.50H	R= 20.0RE	9 - 1976/ 73/ 21.50H	R= 11.6RE	16 - 1976/ 74/ 4.33H	R= 2.1RE
3 - 1976/ 73/ 5.00H	R= 20.1RE	10 - 1976/ 73/ 22.83H	R= 10.0RE	17 - 1976/ 74/ 4.88H	R= 3.0RE
4 - 1976/ 73/ 9.00H	R= 19.7RE	11 - 1976/ 74/ 1.08H	R= 6.8RE	18 - 1976/ 74/ 6.12H	R= 5.6RE
5 - 1976/ 73/ 11.00H	R= 18.7RE	12 - 1976/ 74/ 3.00H	R= 3.2RE	19 - 1976/ 74/ 10.33H	R= 11.5RE
6 - 1976/ 73/ 12.00H	R= 18.3RE	13 - 1976/ 74/ 3.50H	R= 2.0RE		
7 - 1976/ 73/ 13.50H	R= 17.6RE	14 - 1976/ 74/ 3.83H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 72 /12.00H TO1976/ 74 /13.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 74/ 13.17H	LAT= 69.6	11 - 1976/ 75/ 11.17H	LAT= 76.8
2 - 1976/ 74/ 16.83H	LAT= 75.6	12 - 1976/ 75/ 15.67H	LAT= 72.1
3 - 1976/ 74/ 19.67H	LAT= 78.7	13 - 1976/ 75/ 20.67H	LAT= 64.7
4 - 1976/ 74/ 22.17H	LAT= 80.6	14 - 1976/ 76/ 1.00H	LAT= 54.0
5 - 1976/ 74/ 23.67H	LAT= 81.3	15 - 1976/ 76/ 1.00H	LAT= 38.3
6 - 1976/ 75/ 1.17H	LAT= 81.6	16 - 1976/ 76/ 6.17H	LAT= 0.2
7 - 1976/ 75/ 2.67H	LAT= 81.7	17 - 1976/ 76/ 7.17H	LAT= -80.4
8 - 1976/ 75/ 4.17H	LAT= 81.3	18 - 1976/ 76/ 8.58H	LAT= 21.6
9 - 1976/ 75/ 6.17H	LAT= 80.5	19 - 1976/ 76/ 10.92H	LAT= 50.5
10 - 1976/ 75/ 8.17H	LAT= 79.2	20 - 1976/ 76/ 14.00H	LAT= 63.7

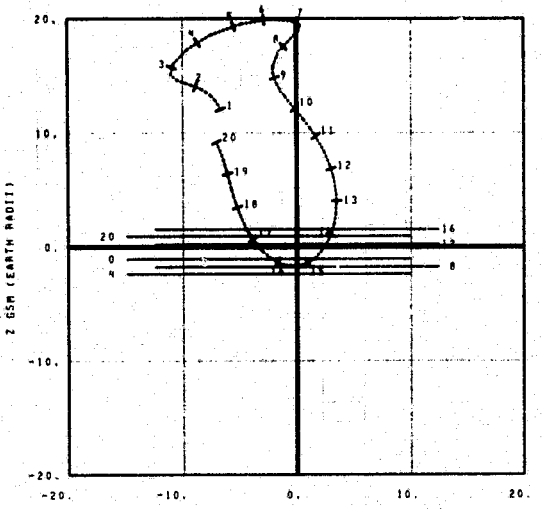
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 74/13.00H TO 1976/ 76/14.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 74/ 13.17H	R= 14.2RE	11 - 1976/ 76/ 2.17H	R= 9.9RE
2 - 1976/ 74/ 17.17H	R= 17.0RE	12 - 1976/ 76/ 3.83H	R= 7.4RE
3 - 1976/ 74/ 23.17H	R= 19.9RE	13 - 1976/ 76/ 5.00H	R= 5.5RE
4 - 1976/ 75/ 2.67H	R= 20.1RE	14 - 1976/ 76/ 6.17H	R= 3.3RE
5 - 1976/ 75/ 5.17H	R= 20.3RE	15 - 1976/ 76/ 7.00H	R= 1.0RE
6 - 1976/ 75/ 7.17H	R= 20.2RE	16 - 1976/ 76/ 7.67H	R= 2.3RE
7 - 1976/ 75/ 10.67H	R= 19.7RE	17 - 1976/ 76/ 8.50H	R= 4.2RE
8 - 1976/ 75/ 16.67H	R= 17.6RE	18 - 1976/ 76/ 9.92H	R= 6.7RE
9 - 1976/ 75/ 21.00H	R= 15.0RE	19 - 1976/ 76/ 11.67H	R= 9.3RE
10 - 1976/ 76/ 0.17H	R= 12.2RE	20 - 1976/ 76/ 14.00H	R= 12.0RE

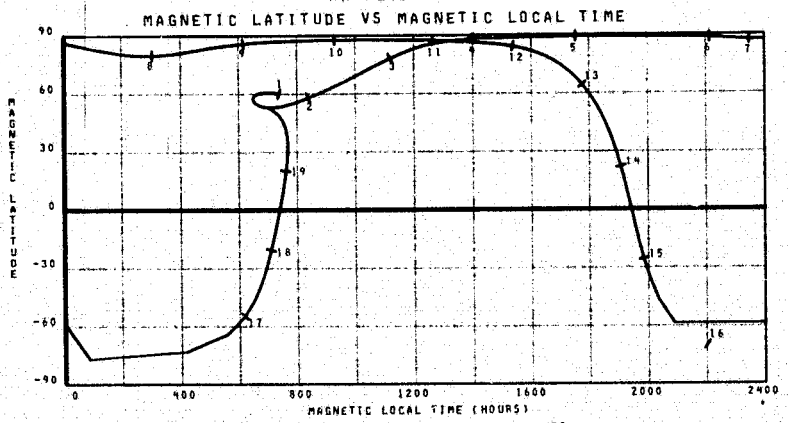
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 74/13.00H TO 1976/ 76/14.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

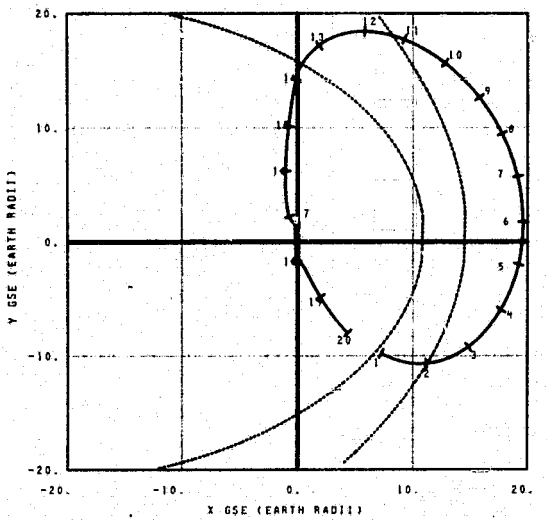
1 - 1976/ 74/ 13.17H	R= 14.2RE	8 - 1976/ 75/ 19.17H	R= 16.2RE	15 - 1976/ 76/ 6.83H	R= 2.0RE
2 - 1976/ 75/ 2.67H	R= 20.1RE	9 - 1976/ 75/ 23.17H	R= 13.1RE	16 - 1976/ 76/ 7.17H	R= 1.7RE
3 - 1976/ 75/ 9.17H	R= 20.0RE	10 - 1976/ 75/ 24.00H	R= 12.3RE	17 - 1976/ 76/ 7.50H	R= 2.0RE
4 - 1976/ 75/ 12.17H	R= 19.4RE	11 - 1976/ 76/ 0.50H	R= 11.0RE	18 - 1976/ 76/ 7.92H	R= 2.8RE
5 - 1976/ 75/ 12.67H	R= 19.2RE	12 - 1976/ 76/ 1.33H	R= 10.9RE	19 - 1976/ 76/ 9.25H	R= 5.5RE
6 - 1976/ 75/ 13.17H	R= 19.1RE	13 - 1976/ 76/ 4.00H	R= 7.2RE		
7 - 1976/ 75/ 13.67H	R= 18.9RE	14 - 1976/ 76/ 6.17H	R= 3.3RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 74/13.00H TO1976/ 76/14.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 76/ 14.17H	LAT= 64.2	11 - 1976/ 77/ 12.50H	LAT= 78.4
2 - 1976/ 76/ 18.00H	LAT= 72.5	12 - 1976/ 77/ 15.50H	LAT= 75.8
3 - 1976/ 76/ 21.33H	LAT= 77.1	13 - 1976/ 77/ 20.50H	LAT= 70.0
4 - 1976/ 76/ 24.00H	LAT= 79.6	14 - 1976/ 78/ 1.17H	LAT= 62.2
5 - 1976/ 77/ 2.00H	LAT= 80.9	15 - 1976/ 78/ 5.17H	LAT= 50.4
6 - 1976/ 77/ 3.50H	LAT= 81.5	16 - 1976/ 78/ 7.83H	LAT= 32.5
7 - 1976/ 77/ 5.00H	LAT= 81.7	17 - 1976/ 78/ 9.83H	LAT= -25.2
8 - 1976/ 77/ 6.50H	LAT= 81.6	18 - 1976/ 78/ 10.42H	LAT= -77.5
9 - 1976/ 77/ 8.00H	LAT= 81.1	19 - 1976/ 78/ 12.30H	LAT= 31.7
10 - 1976/ 77/ 10.00H	LAT= 80.1	20 - 1976/ 78/ 14.75H	LAT= 54.0

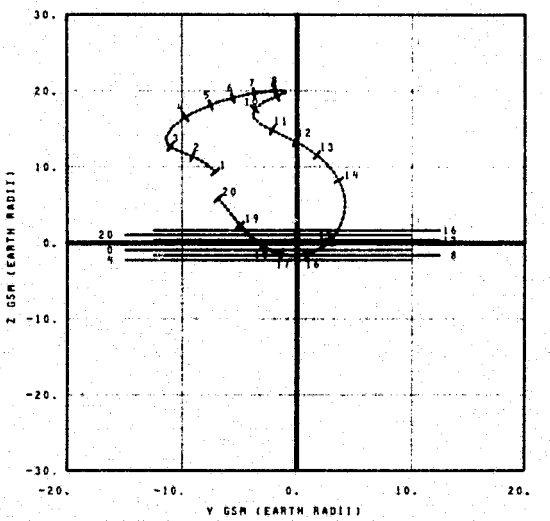
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 76/14.00H TO 1976/ 78/15.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 76/ 14.17H	R= 12.2R_E	11 - 1976/ 78/ 0.17H	R= 15.0R_E
2 - 1976/ 76/ 17.33H	R= 15.0R_E	12 - 1976/ 78/ 2.17H	R= 13.3R_E
3 - 1976/ 76/ 20.67H	R= 17.1R_E	13 - 1976/ 78/ 3.83H	R= 11.7R_E
4 - 1976/ 77/ 2.50H	R= 19.5R_E	14 - 1976/ 78/ 6.00H	R= 9.1R_E
5 - 1976/ 77/ 4.50H	R= 19.9R_E	15 - 1976/ 78/ 9.58H	R= 2.9R_E
6 - 1976/ 77/ 6.00H	R= 20.1R_E	16 - 1976/ 78/ 10.25H	R= 1.7R_E
7 - 1976/ 77/ 7.50H	R= 20.2R_E	17 - 1976/ 78/ 10.75H	R= 2.0R_E
8 - 1976/ 77/ 9.50H	R= 20.3R_E	18 - 1976/ 78/ 11.32H	R= 3.2R_E
9 - 1976/ 77/ 15.00H	R= 19.5R_E	19 - 1976/ 78/ 12.63H	R= 5.0R_E
10 - 1976/ 77/ 19.00H	R= 18.1R_E	20 - 1976/ 78/ 15.00H	R= 9.4R_E

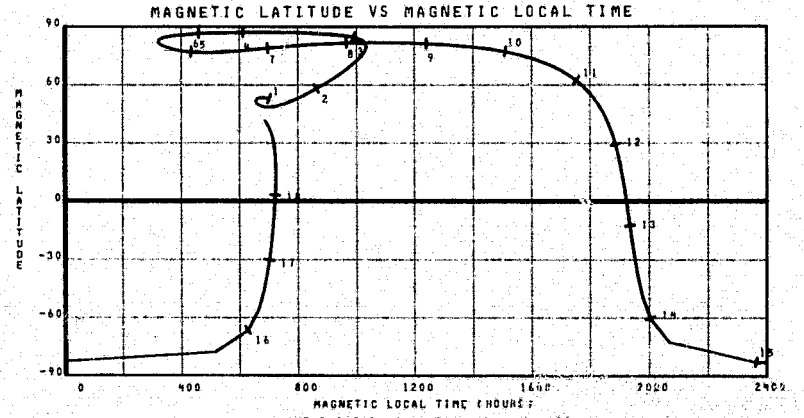
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 76/14.00H TO 1976/ 78/15.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

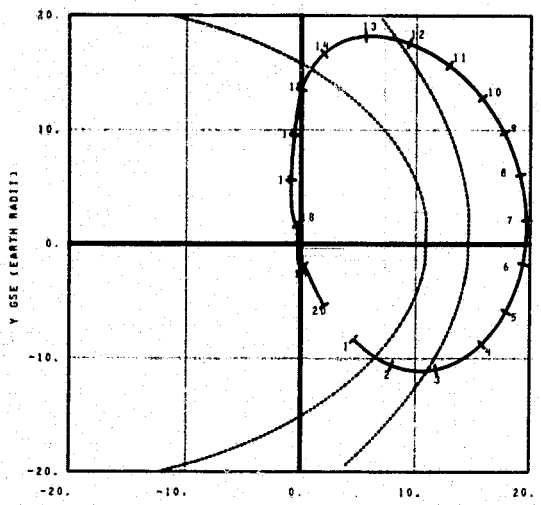
1 - 1976/ 76/ 14.17H	R= 12.2R_E	8 - 1976/ 78/ 1.17H	R= 14.2R_E	15 - 1976/ 78/ 10.42H	R= 1.7R_E
2 - 1976/ 77/ 4.00H	R= 19.8R_E	9 - 1976/ 78/ 2.50H	R= 13.8R_E	16 - 1976/ 78/ 10.58H	R= 1.8R_E
3 - 1976/ 77/ 11.50H	R= 20.1R_E	10 - 1976/ 78/ 4.00H	R= 11.3R_E	17 - 1976/ 78/ 10.92H	R= 2.3R_E
4 - 1976/ 77/ 13.00H	R= 19.9R_E	11 - 1976/ 78/ 6.50H	R= 8.4R_E	18 - 1976/ 78/ 11.59H	R= 3.7R_E
5 - 1976/ 77/ 13.58H	R= 19.8R_E	12 - 1976/ 78/ 8.92H	R= 6.3R_E		
6 - 1976/ 77/ 14.08H	R= 18.1R_E	13 - 1976/ 78/ 9.83H	R= 4.9R_E		
7 - 1976/ 77/ 23.17H	R= 15.7R_E	14 - 1976/ 78/ 10.25H	R= 1.7R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 76/14.00H TO1976/ 78/15.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 78/ 15.00H	LAT= 55.7	11 - 1976/ 79/ 13.67H	LAT= 79.9		
2 - 1976/ 78/ 18.50H	LAT= 67.1	12 - 1976/ 79/ 16.17H	LAT= 78.1		
3 - 1976/ 78/ 22.17H	LAT= 74.0	13 - 1976/ 79/ 19.67H	LAT= 74.9		
4 - 1976/ 79/ 1.67H	LAT= 78.3	14 - 1976/ 80/ 0.67H	LAT= 68.7		
5 - 1976/ 79/ 3.67H	LAT= 80.0	15 - 1976/ 80/ 5.17H	LAT= 60.4		
6 - 1976/ 79/ 5.67H	LAT= 81.1	16 - 1976/ 80/ 8.83H	LAT= 48.4		
7 - 1976/ 79/ 7.17H	LAT= 81.6	17 - 1976/ 80/ 11.42H	LAT= 28.0		
8 - 1976/ 79/ 8.67H	LAT= 81.7	18 - 1976/ 80/ 13.42H	LAT= -49.4		
9 - 1976/ 79/ 10.17H	LAT= 81.5	19 - 1976/ 80/ 13.92H	LAT= -70.3		
10 - 1976/ 79/ 11.67H	LAT= 81.0	20 - 1976/ 80/ 15.83H	LAT= 36.3		

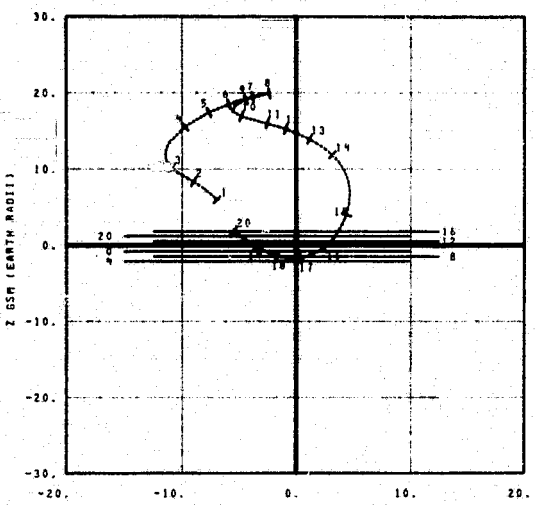
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 78/15.00H TO 1976/ 80/16.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 78/ 15.00H R= 9.5R_E	11 - 1976/ 80/ 1.67H	R= 16.2R_E	
2 - 1976/ 78/ 17.83H R= 12.4R_E	12 - 1976/ 80/ 3.80H	R= 15.3R_E	
3 - 1976/ 78/ 21.00H R= 15.3R_E	13 - 1976/ 80/ 5.67H	R= 15.9R_E	
4 - 1976/ 79/ 3.17H R= 18.6R_E	14 - 1976/ 80/ 6.96H	R= 12.3R_E	
5 - 1976/ 79/ 5.17H R= 19.3R_E	15 - 1976/ 80/ 11.25H	R= 6.0R_E	
6 - 1976/ 79/ 6.67H R= 19.7R_E	16 - 1976/ 80/ 13.00H	R= 2.5R_E	
7 - 1976/ 79/ 8.67H R= 20.0R_E	17 - 1976/ 80/ 13.58H	R= 1.7R_E	
8 - 1976/ 79/ 13.17H R= 20.2R_E	18 - 1976/ 80/ 14.08H	R= 2.2R_E	
9 - 1976/ 79/ 17.17H R= 19.7R_E	19 - 1976/ 80/ 14.77H	R= 3.7R_E	
10 - 1976/ 79/ 23.17H R= 17.4R_E	20 - 1976/ 80/ 16.00H	R= 6.1R_E	

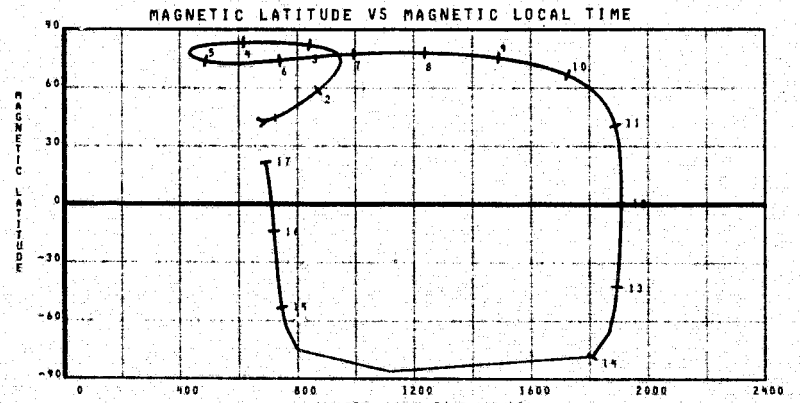
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 78/15.00H TO 1976/ 80/16.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

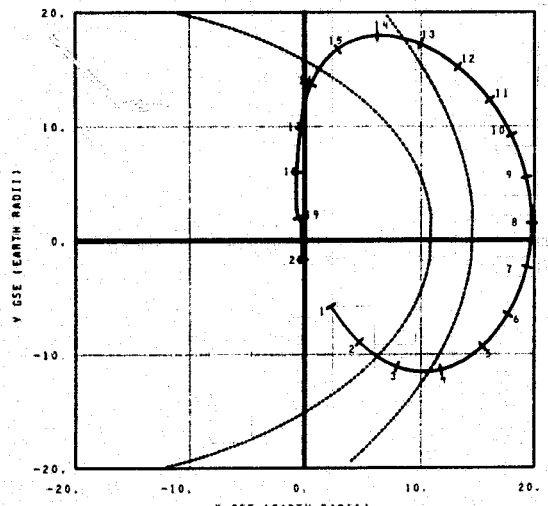
1 - 1976/ 78/ 15.00H R= 9.5R_E	8 - 1976/ 80/ 9.00H R= 19.5R_E	15 - 1976/ 80/ 13.92H R= 2.0R_E	
2 - 1976/ 79/ 5.17H R= 19.3R_E	9 - 1976/ 80/ 9.67H R= 19.1R_E	16 - 1976/ 80/ 14.42H R= 2.9R_E	
3 - 1976/ 79/ 11.67H R= 20.3R_E	10 - 1976/ 80/ 9.00H R= 18.6R_E	17 - 1976/ 80/ 16.00H R= 6.1R_E	
4 - 1976/ 79/ 13.17H R= 20.2R_E	11 - 1976/ 80/ 11.33H R= 9.0R_E		
5 - 1976/ 79/ 18.67H R= 19.3R_E	12 - 1976/ 80/ 12.83H R= 2.8R_E		
6 - 1976/ 79/ 23.67H R= 17.3R_E	13 - 1976/ 80/ 13.33H R= 1.9R_E		
7 - 1976/ 80/ 2.33H R= 15.7R_E	14 - 1976/ 80/ 13.58H R= 1.7R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 78/15.00H TO1976/ 80/16.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 80/ 16.00 H	LAT= 39.9	11 - 1976/ 81/ 15.00 H	LAT= 81.0
2 - 1976/ 80/ 18.75 H	LAT= 57.7	12 - 1976/ 81/ 17.00 H	LAT= 79.9
3 - 1976/ 80/ 22.17 H	LAT= 68.1	13 - 1976/ 81/ 19.50 H	LAT= 78.1
4 - 1976/ 81/ 1.83 H	LAT= 74.6	14 - 1976/ 81/ 23.00 H	LAT= 74.8
5 - 1976/ 81/ 5.00 H	LAT= 78.3	15 - 1976/ 82/ 3.50 H	LAT= 69.3
6 - 1976/ 81/ 7.00 H	LAT= 80.0	16 - 1976/ 82/ 8.17 H	LAT= 61.0
7 - 1976/ 81/ 9.00 H	LAT= 81.1	17 - 1976/ 82/ 11.83 H	LAT= 99.9
8 - 1976/ 81/ 10.50 H	LAT= 81.6	18 - 1976/ 82/ 14.42 H	LAT= 30.8
9 - 1976/ 81/ 12.00 H	LAT= 81.7	19 - 1976/ 82/ 16.42 H	LAT= -30.7
10 - 1976/ 81/ 12.50 H	LAT= 81.5	20 - 1976/ 82/ 16.83 H	LAT= -79.6

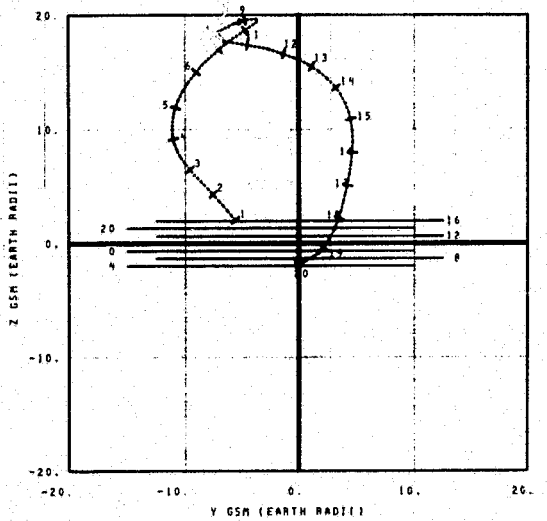
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 80/16.00H TO 1976/ 82/17.00H

HAWKEYE-1

PROJECTED INTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 80/ 16.00 H	R= 6.2 R_E	11 - 1976/ 82/ 1.50 H	R= 18.0 R_E
2 - 1976/ 80/ 17.92 H	R= 9.0 R_E	12 - 1976/ 82/ 4.00 H	R= 16.7 R_E
3 - 1976/ 80/ 20.33 H	R= 11.9 R_E	13 - 1976/ 82/ 5.83 H	R= 15.5 R_E
4 - 1976/ 80/ 23.33 H	R= 14.6 R_E	14 - 1976/ 82/ 7.83 H	R= 14.0 R_E
5 - 1976/ 81/ 1.83 H	R= 16.4 R_E	15 - 1976/ 82/ 10.17 H	R= 11.8 R_E
6 - 1976/ 81/ 4.50 H	R= 17.8 R_E	16 - 1976/ 82/ 12.33 H	R= 9.2 R_E
7 - 1976/ 81/ 6.50 H	R= 18.7 R_E	17 - 1976/ 82/ 14.08 H	R= 6.6 R_E
8 - 1976/ 81/ 9.00 H	R= 19.5 R_E	18 - 1976/ 82/ 15.42 H	R= 4.2 R_E
9 - 1976/ 81/ 15.50 H	R= 20.3 R_E	19 - 1976/ 82/ 16.33 H	R= 2.2 R_E
10 - 1976/ 81/ 20.50 H	R= 19.7 R_E	20 - 1976/ 82/ 17.00 H	R= 1.0 R_E

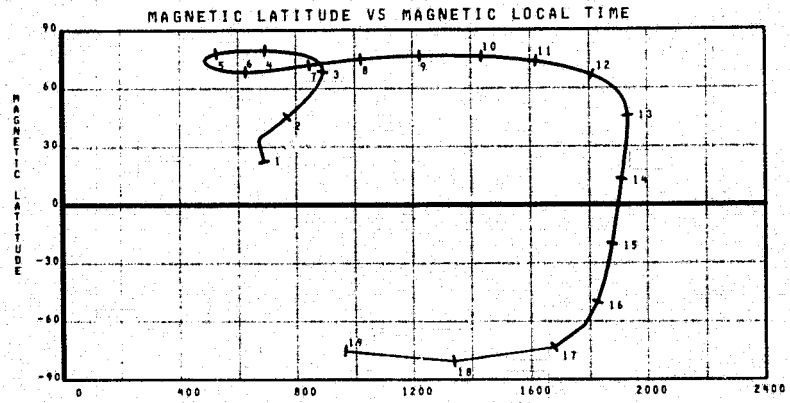
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 80/16.00H TO 1976/ 82/17.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

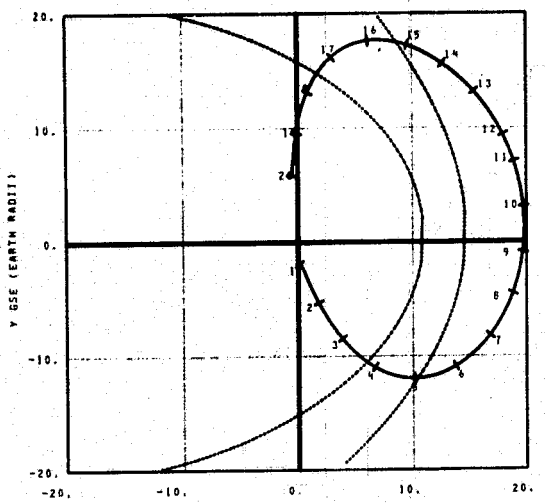
1 - 1976/ 80/ 16.00 H	R= 6.2 R_E	8 - 1976/ 82/ 3.50 H	R= 17.0 R_E	15 - 1976/ 82/ 14.42 H	R= 2.1 R_E
2 - 1976/ 81/ 2.33 H	R= 14.7 R_E	9 - 1976/ 82/ 5.17 H	R= 16.0 R_E	16 - 1976/ 82/ 16.67 H	R= 1.0 R_E
3 - 1976/ 81/ 8.50 H	R= 19.2 R_E	10 - 1976/ 82/ 6.67 H	R= 14.9 R_E	17 - 1976/ 82/ 16.83 H	R= 1.7 R_E
4 - 1976/ 81/ 12.50 H	R= 20.1 R_E	11 - 1976/ 82/ 8.17 H	R= 13.7 R_E	18 - 1976/ 82/ 16.92 H	R= 1.7 R_E
5 - 1976/ 81/ 19.50 H	R= 20.3 R_E	12 - 1976/ 82/ 10.50 H	R= 11.4 R_E	19 - 1976/ 82/ 17.00 H	R= 1.0 R_E
6 - 1976/ 81/ 21.50 H	R= 19.4 R_E	13 - 1976/ 82/ 14.33 H	R= 6.2 R_E		
7 - 1976/ 82/ 1.50 H	R= 18.0 R_E	14 - 1976/ 82/ 15.92 H	R= 3.1 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 80 /16.00H TO1976/ 82 /17.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 02/ 17.00H	LAT=	-46.5	11 - 1976/ 03/ 16.17H	LAT=	81.
2 - 1976/ 02/ 18.95H	LAT=	39.8	12 - 1976/ 03/ 17.17H	LAT=	81.
3 - 1976/ 02/ 21.33H	LAT=	54.6	13 - 1976/ 03/ 19.17H	LAT=	80.
4 - 1976/ 03/ 0.50H	LAT=	65.9	14 - 1976/ 03/ 21.17H	LAT=	79.
5 - 1976/ 03/ 4.00H	LAT=	72.9	15 - 1976/ 03/ 23.67H	LAT=	77.
6 - 1976/ 03/ 7.17H	LAT=	77.2	16 - 1976/ 04/ 3.17H	LAT=	73.
7 - 1976/ 03/ 9.67H	LAT=	79.6	17 - 1976/ 04/ 7.67H	LAT=	60.
8 - 1976/ 03/ 11.67H	LAT=	80.9	18 - 1976/ 04/ 12.00H	LAT=	59.
9 - 1976/ 03/ 13.17H	LAT=	81.5	19 - 1976/ 04/ 15.33H	LAT=	48.
10 - 1976/ 03/ 14.67H	LAT=	81.7	20 - 1976/ 04/ 17.79H	LAT=	29.3

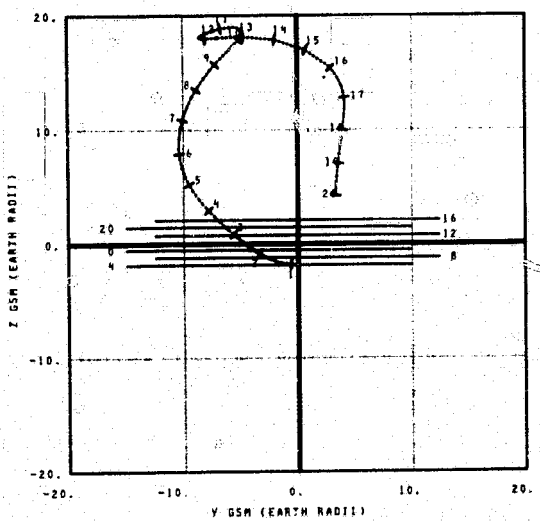
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 02/17.00H TO 1976/ 04/18.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 02/ 17.00H	R= 1.9RE	11 - 1976/ 03/ 16.67H	R= 26.2RE
2 - 1976/ 02/ 17.95H	R= 3.6RE	12 - 1976/ 03/ 23.17H	R= 19.8RE
3 - 1976/ 02/ 19.13H	R= 5.9RE	13 - 1976/ 04/ 2.67H	R= 10.8RE
4 - 1976/ 02/ 20.83H	R= 8.4RE	14 - 1976/ 04/ 4.67H	R= 10.8RE
5 - 1976/ 02/ 22.83H	R= 11.1RE	15 - 1976/ 04/ 6.67H	R= 17.0RE
6 - 1976/ 03/ 1.00H	R= 13.3RE	16 - 1976/ 04/ 8.83H	R= 15.7RE
7 - 1976/ 03/ 3.17H	R= 15.1RE	17 - 1976/ 04/ 11.67H	R= 13.5RE
8 - 1976/ 03/ 5.17H	R= 16.9RE	18 - 1976/ 04/ 14.33H	R= 10.7RE
9 - 1976/ 03/ 7.17H	R= 17.6RE	19 - 1976/ 04/ 16.50H	R= 7.9RE
10 - 1976/ 03/ 10.17H	R= 18.0RE	20 - 1976/ 04/ 18.00H	R= 5.4RE

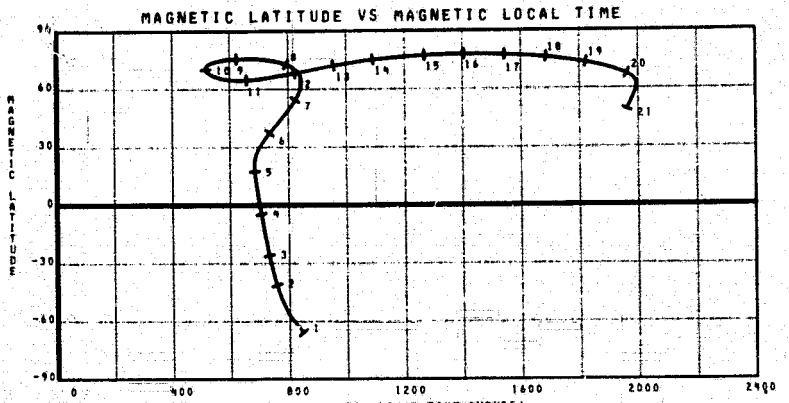
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 02/17.00H TO 1976/ 04/18.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

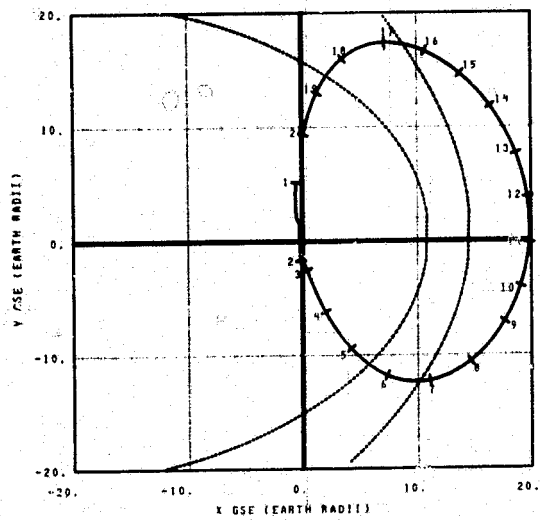
1 - 1976/ 02/ 17.00H	R=	1.9RE	8 - 1976/ 03/ 10.67H	R=	19.0RE	15 - 1976/ 04/ 6.67H	R=	17.0RE
2 - 1976/ 02/ 17.33H	R=	2.3RE	9 - 1976/ 03/ 13.17H	R=	19.7RE	16 - 1976/ 04/ 7.67H	R=	16.9RE
3 - 1976/ 02/ 17.97H	R=	2.8RE	10 - 1976/ 03/ 16.67H	R=	20.2RE	17 - 1976/ 04/ 8.67H	R=	15.8RE
4 - 1976/ 02/ 18.13H	R=	4.0RE	11 - 1976/ 03/ 22.17H	R=	20.0RE	18 - 1976/ 04/ 9.83H	R=	15.0RE
5 - 1976/ 02/ 20.00H	R=	7.3RE	12 - 1976/ 04/ 1.67H	R=	19.2RE	19 - 1976/ 04/ 11.33H	R=	13.0RE
6 - 1976/ 03/ 1.67H	R=	13.9RE	13 - 1976/ 04/ 3.67H	R=	18.5RE	20 - 1976/ 04/ 14.00H	R=	11.1RE
7 - 1976/ 03/ 6.00H	R=	16.9RE	14 - 1976/ 04/ 5.17H	R=	17.8RE	21 - 1976/ 04/ 18.00H	R=	5.4RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 02/17.00H TO1976/ 04/18.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 84/ 18.00 H	LAT=	24.5	11 - 1976/ 85/ 17.00 H	LAT=	81.6
2 - 1976/ 84/ 20.00 H	LAT=	-75.8	12 - 1976/ 85/ 18.50 H	LAT=	81.7
3 - 1976/ 84/ 20.67 H	LAT=	-11.8	13 - 1976/ 85/ 20.00 H	LAT=	81.5
4 - 1976/ 84/ 22.67 H	LAT=	40.8	14 - 1976/ 85/ 22.00 H	LAT=	80.8
5 - 1976/ 85/ 1.33 H	LAT=	58.1	15 - 1976/ 85/ 25.00 H	LAT=	79.6
6 - 1976/ 85/ 4.83 H	LAT=	68.4	16 - 1976/ 86/ 2.50 H	LAT=	77.7
7 - 1976/ 85/ 8.50 H	LAT=	74.8	17 - 1976/ 86/ 6.00 H	LAT=	74.3
8 - 1976/ 85/ 11.50 H	LAT=	78.3	18 - 1976/ 86/ 11.00 H	LAT=	67.9
9 - 1976/ 85/ 14.00 H	LAT=	80.3	19 - 1976/ 86/ 15.33 H	LAT=	59.3
10 - 1976/ 85/ 15.50 H	LAT=	81.1	20 - 1976/ 86/ 18.67 H	LAT=	47.6

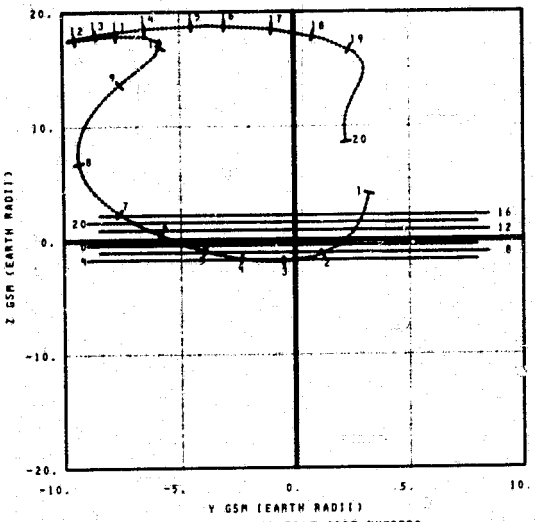
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 84/18.00H TO 1976/ 86/19.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 84/ 18.00 H	R=	9.2 R_E	11 - 1976/ 85/ 16.50 H	R=	19.7 R_E
2 - 1976/ 84/ 19.92 H	R=	1.7 R_E	12 - 1976/ 85/ 19.50 H	R=	20.2 R_E
3 - 1976/ 84/ 20.33 H	R=	1.9 R_E	13 - 1976/ 86/ 0.50 H	R=	20.1 R_E
4 - 1976/ 84/ 20.83 H	R=	2.9 R_E	14 - 1976/ 86/ 2.50 H	R=	19.8 R_E
5 - 1976/ 84/ 21.92 H	R=	4.2 R_E	15 - 1976/ 86/ 4.00 H	R=	19.4 R_E
6 - 1976/ 84/ 22.92 H	R=	6.0 R_E	16 - 1976/ 86/ 5.00 H	R=	19.1 R_E
7 - 1976/ 84/ 23.75 H	R=	8.2 R_E	17 - 1976/ 86/ 6.50 H	R=	18.6 R_E
8 - 1976/ 85/ 2.67 H	R=	11.8 R_E	18 - 1976/ 86/ 8.00 H	R=	18.0 R_E
9 - 1976/ 85/ 7.50 H	R=	15.9 R_E	19 - 1976/ 86/ 10.00 H	R=	17.0 R_E
10 - 1976/ 85/ 11.50 H	R=	18.1 R_E	20 - 1976/ 86/ 19.00 H	R=	8.9 R_E

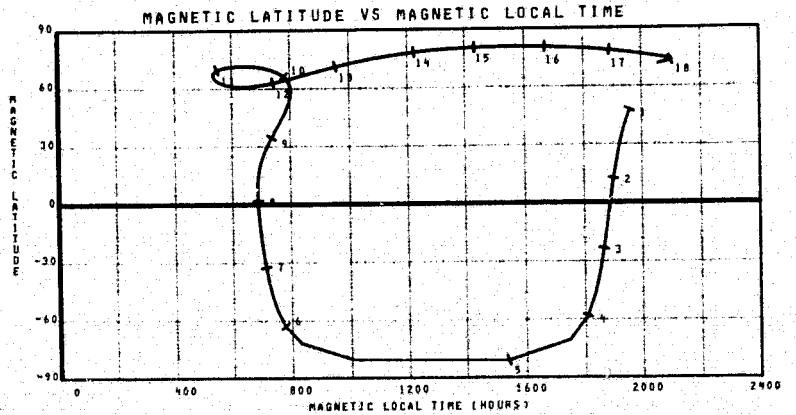
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 84/18.00H TO 1976/ 86/19.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

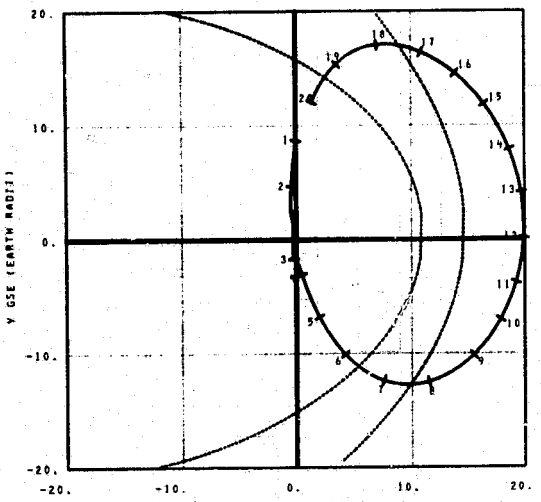
1 - 1976/ 84/ 18.00 H	R=	5.2 R_E	8 - 1976/ 84/ 22.17 H	R=	9.6 R_E	15 - 1976/ 86/ 9.00 H	R= 17.9 R_E
2 - 1976/ 84/ 19.33 H	R=	2.7 R_E	9 - 1976/ 85/ 1.00 H	R=	12.1 R_E	16 - 1976/ 86/ 10.50 H	R= 16.7 R_E
3 - 1976/ 84/ 19.75 H	R=	1.9 R_E	10 - 1976/ 85/ 4.83 H	R=	17.3 R_E	17 - 1976/ 86/ 12.33 H	R= 15.5 R_E
4 - 1976/ 84/ 20.00 H	R=	1.7 R_E	11 - 1976/ 85/ 15.00 H	R=	19.4 R_E	18 - 1976/ 86/ 17.67 H	R= 10.6 R_E
5 - 1976/ 84/ 20.17 H	R=	1.7 R_E	12 - 1976/ 86/ 0.50 H	R=	20.1 R_E		
6 - 1976/ 84/ 20.42 H	R=	2.1 R_E	13 - 1976/ 86/ 4.50 H	R=	19.3 R_E		
7 - 1976/ 84/ 20.83 H	R=	2.9 R_E	14 - 1976/ 86/ 7.50 H	R=	18.2 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 84/18.00H TO1976/ 86/19.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 06/ 19.17H	LAT= 49.9	11 - 1976/ 07/ 19.17H	LAT= 81.3
2 - 1976/ 06/ 21.50H	LAT= 19.4	12 - 1976/ 07/ 20.67H	LAT= 81.6
3 - 1976/ 06/ 23.25H	LAT= -60.9	13 - 1976/ 07/ 22.17H	LAT= 81.7
4 - 1976/ 07/ 0.15H	LAT= 3.3	14 - 1976/ 07/ 23.67H	LAT= 81.9
5 - 1976/ 07/ 2.25H	LAT= 49.3	15 - 1976/ 08/ 1.67H	LAT= 80.6
6 - 1976/ 07/ 5.08H	LAT= 69.1	16 - 1976/ 08/ 3.67H	LAT= 79.3
7 - 1976/ 07/ 8.83H	LAT= 78.0	17 - 1976/ 08/ 6.17H	LAT= 77.3
8 - 1976/ 07/ 12.50H	LAT= 75.8	18 - 1976/ 08/ 10.17H	LAT= 73.3
9 - 1976/ 07/ 15.67H	LAT= 79.1	19 - 1976/ 08/ 15.17H	LAT= 66.9
10 - 1976/ 07/ 17.67H	LAT= 80.5	20 - 1976/ 08/ 19.50H	LAT= 56.8

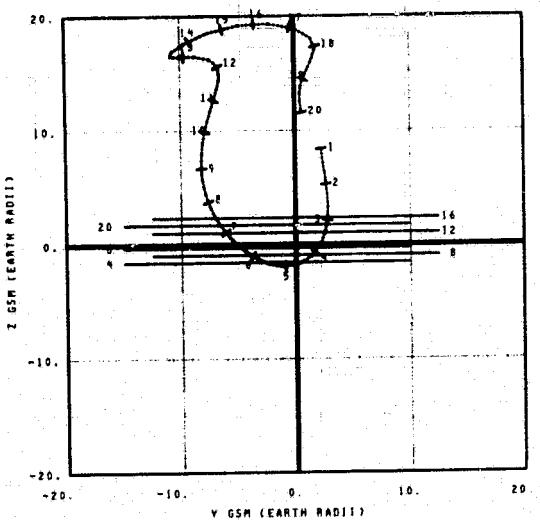
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 06/19.00H TO 1976/ 08/20.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 06/ 19.17H	R= 8.7RE	11 - 1976/ 07/ 9.17H	R= 14.8RE
2 - 1976/ 06/ 20.92H	R= 5.9RE	12 - 1976/ 07/ 13.00H	R= 17.2RE
3 - 1976/ 06/ 22.17H	R= 3.5RE	13 - 1976/ 07/ 16.17H	R= 19.3RE
4 - 1976/ 06/ 23.00H	R= 1.9RE	14 - 1976/ 08/ 1.17H	R= 20.3RE
5 - 1976/ 06/ 23.67H	R= 2.1RE	15 - 1976/ 08/ 3.67H	R= 20.1RE
6 - 1976/ 07/ 0.57H	R= 4.0RE	16 - 1976/ 08/ 5.67H	R= 19.8RE
7 - 1976/ 07/ 1.83H	R= 6.4RE	17 - 1976/ 08/ 8.17H	R= 19.2RE
8 - 1976/ 07/ 3.33H	R= 8.7RE	18 - 1976/ 08/ 12.17H	R= 17.9RE
9 - 1976/ 07/ 5.00H	R= 10.8RE	19 - 1976/ 08/ 16.83H	R= 14.5RE
10 - 1976/ 07/ [illegible].00H	R= 12.9RE	20 - 1976/ 08/ 20.00H	R= 11.6RE

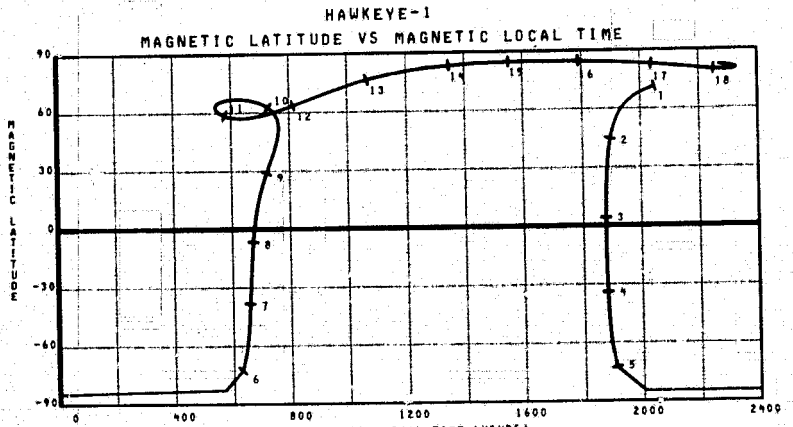
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 06/19.00H TO 1976/ 08/20.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

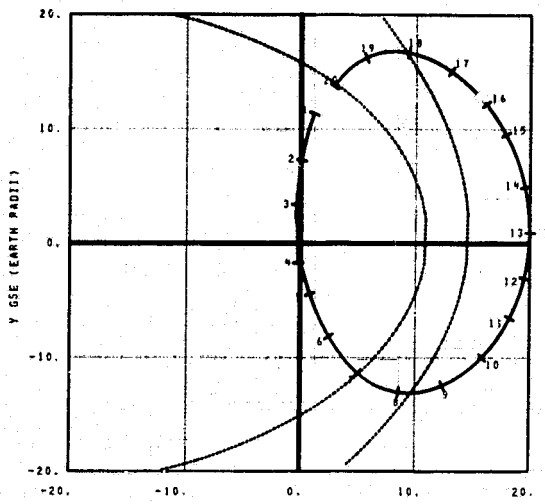
1 - 1976/ 06/ 19.17H	R= 8.7RE	8 - 1976/ 07/ 0.90H	R= 4.7RE	15 - 1976/ 08/ 10.67H	R= 18.2RE
2 - 1976/ 06/ 21.92H	R= 6.0RE	9 - 1976/ 07/ 4.08H	R= 9.4RE	16 - 1976/ 08/ 11.67H	R= 17.8RE
3 - 1976/ 06/ 22.75H	R= 2.3RE	10 - 1976/ 07/ 10.33H	R= 15.6RE	17 - 1976/ 08/ 13.17H	R= 17.9RE
4 - 1976/ 06/ 23.08H	R= 1.8RE	11 - 1976/ 07/ 19.17H	R= 19.6RE	18 - 1976/ 08/ 19.83H	R= 15.3RE
5 - 1976/ 06/ 23.33H	R= 1.7RE	12 - 1976/ 08/ 0.67H	R= 20.2RE		
6 - 1976/ 06/ 23.58H	R= 2.0RE	13 - 1976/ 08/ 7.17H	R= 19.9RE		
7 - 1976/ 06/ 24.00H	R= 3.0RE	14 - 1976/ 08/ 9.67H	R= 18.6RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 06 /19.00H TO1976/ 08 /20.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 88/ 20.17H	LAT= 54.7	11 - 1976/ 89/ 21.50H	LAT= 80.9		
2 - 1976/ 88/ 23.33H	LAT= 38.3	12 - 1976/ 89/ 23.00H	LAT= 81.4		
3 - 1976/ 89/ 1.42H	LAT= 2.9	13 - 1976/ 90/ 0.50H	LAT= 81.7		
4 - 1976/ 89/ 2.50H	LAT= -77.7	14 - 1976/ 90/ 2.06H	LAT= 81.6		
5 - 1976/ 89/ 4.02H	LAT= 24.2	15 - 1976/ 90/ 4.00H	LAT= 81.0		
6 - 1976/ 89/ 6.42H	LAT= 51.2	16 - 1976/ 90/ 5.50H	LAT= 80.2		
7 - 1976/ 89/ 9.67H	LAT= 64.9	17 - 1976/ 90/ 8.00H	LAT= 78.5		
8 - 1976/ 89/ 13.50H	LAT= 72.5	18 - 1976/ 90/ 11.50H	LAT= 75.9		
9 - 1976/ 89/ 16.83H	LAT= 77.0	19 - 1976/ 90/ 16.00H	LAT= 70.1		
10 - 1976/ 89/ 19.50H	LAT= 79.6	20 - 1976/ 90/ 20.67H	LAT= 62.0		

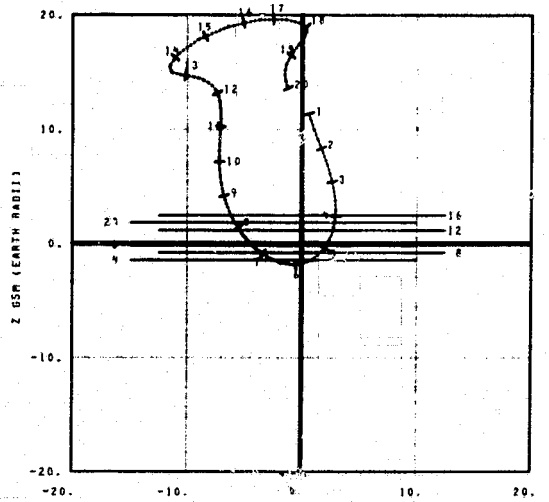
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 88/20.00H TO 1976/ 90/21.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 88/ 20.17H	R= 11.4RE	11 - 1976/ 89/ 10.00H	R= 12.7RE
2 - 1976/ 88/ 22.50H	R= 8.5RE	12 - 1976/ 89/ 13.17H	R= 15.3RE
3 - 1976/ 89/ 0.08H	R= 4.0RE	13 - 1976/ 89/ 18.00H	R= 18.1RE
4 - 1976/ 89/ 1.25H	R= 3.0RE	14 - 1976/ 89/ 24.00H	R= 19.9RE
5 - 1976/ 89/ 2.08H	R= 2.1RE	15 - 1976/ 90/ 3.00H	R= 20.2RE
6 - 1976/ 89/ 2.75H	R= 1.9RE	16 - 1976/ 90/ 5.50H	R= 20.2RE
7 - 1976/ 89/ 3.50H	R= 3.6RE	17 - 1976/ 90/ 7.50H	R= 20.0RE
8 - 1976/ 89/ 4.75H	R= 5.8RE	18 - 1976/ 90/ 11.50H	R= 19.1RE
9 - 1976/ 89/ 6.17H	R= 8.1RE	19 - 1976/ 90/ 17.00H	R= 16.6RE
10 - 1976/ 89/ 7.83H	R= 10.3RE	20 - 1976/ 90/ 21.00H	R= 13.7RE

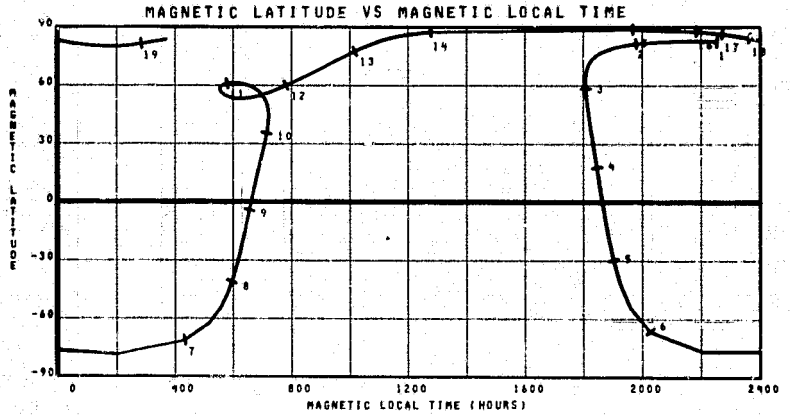
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 88/20.00H TO 1976/ 90/21.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

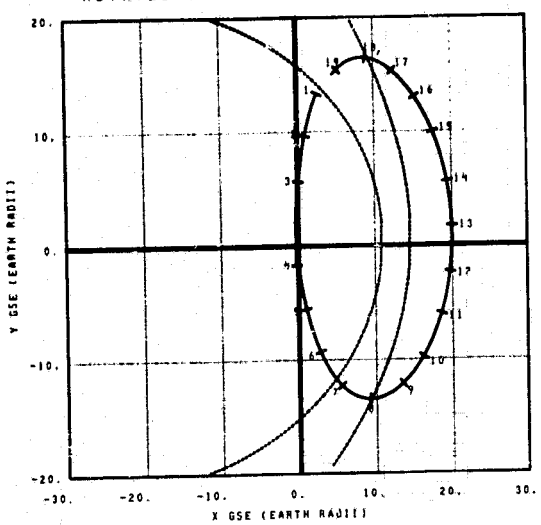
1 - 1976/ 88/ 20.17H	R= 11.4RE	8 - 1976/ 89/ 3.08H	R= 2.5RE	15 - 1976/ 90/ 12.00H	R= 19.0RE
2 - 1976/ 88/ 21.83H	R= 9.4RE	9 - 1976/ 89/ 3.92H	R= 4.3RE	16 - 1976/ 90/ 12.50H	R= 18.6RE
3 - 1976/ 89/ 0.58H	R= 5.3RE	10 - 1976/ 89/ 4.83H	R= 6.1RE	17 - 1976/ 90/ 13.00H	R= 18.0RE
4 - 1976/ 89/ 1.75H	R= 2.7RE	11 - 1976/ 89/ 14.17H	R= 16.0RE	18 - 1976/ 90/ 14.00H	R= 16.8RE
5 - 1976/ 89/ 2.25H	R= 1.8RE	12 - 1976/ 90/ 2.50H	R= 20.2RE	19 - 1976/ 90/ 19.67H	R= 14.0RE
6 - 1976/ 89/ 2.50H	R= 1.7RE	13 - 1976/ 90/ 8.05H	R= 20.6RE		
7 - 1976/ 89/ 2.75H	R= 1.9RE	14 - 1976/ 90/ 11.00H	R= 19.3RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 88/20.00H TO1976/ 90/21.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 90/ 21.17H	LAT=	60.9	11 - 1976/ 92/	1.33H	LAT=	81.1
2 - 1976/ 91/ 0.83H	LAT=	49.0	12 - 1976/ 92/	2.83H	LAT=	81.6
3 - 1976/ 91/ 3.50H	LAT=	28.2	13 - 1976/ 92/	4.33H	LAT=	81.7
4 - 1976/ 91/ 5.67H	LAT=	-81.6	14 - 1976/ 92/	5.83H	LAT=	81.5
5 - 1976/ 91/ 7.83H	LAT=	34.8	15 - 1976/ 92/	7.83H	LAT=	80.7
6 - 1976/ 91/ 10.50H	LAT=	55.8	16 - 1976/ 92/	9.83H	LAT=	79.6
7 - 1976/ 91/ 14.00H	LAT=	67.2	17 - 1976/ 92/	12.33H	LAT=	77.8
8 - 1976/ 91/ 17.83H	LAT=	74.2	18 - 1976/ 92/	15.83H	LAT=	74.3
9 - 1976/ 91/ 21.33H	LAT=	78.5	19 - 1976/ 92/	20.83H	LAT=	67.7
10 - 1976/ 91/ 23.33H	LAT=	80.0				

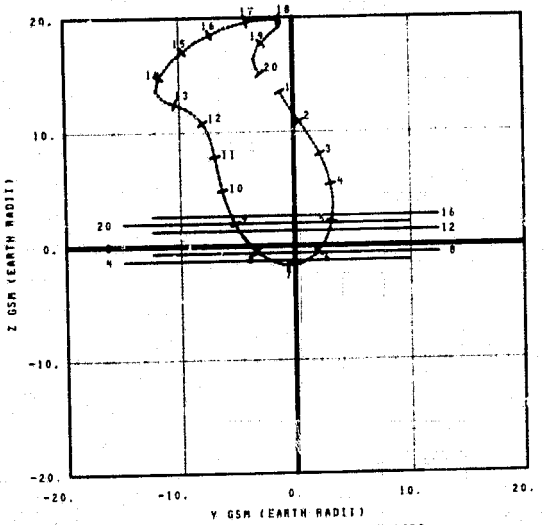
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 90/21.00H TO 1976/ 92/22.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 90/ 21.17H	R=	13.4RE	11 - 1976/ 91/	11.25H	R=	10.6RE
2 - 1976/ 90/ 23.83H	R=	10.9RE	12 - 1976/ 91/	14.17H	R=	13.6RE
3 - 1976/ 91/ 1.83H	R=	8.3RE	13 - 1976/ 91/	18.00H	R=	14.9RE
4 - 1976/ 91/ 3.17H	R=	6.3RE	14 - 1976/ 91/	23.83H	R=	19.1RE
5 - 1976/ 91/ 5.42H	R=	3.9RE	15 - 1976/ 92/	3.83H	R=	19.9RE
6 - 1976/ 91/ 9.25H	R=	2.1RE	16 - 1976/ 92/	6.83H	R=	20.1RE
7 - 1976/ 91/ 5.92H	R=	1.8RE	17 - 1976/ 92/	7.33H	R=	20.3RE
8 - 1976/ 91/ 6.72H	R=	3.4RE	18 - 1976/ 92/	10.83H	R=	20.0RE
9 - 1976/ 91/ 7.83H	R=	5.6RE	19 - 1976/ 92/	17.33H	R=	18.1RE
10 - 1976/ 91/ 9.33H	R=	8.1RE	20 - 1976/ 92/	22.00H	R=	15.9RE

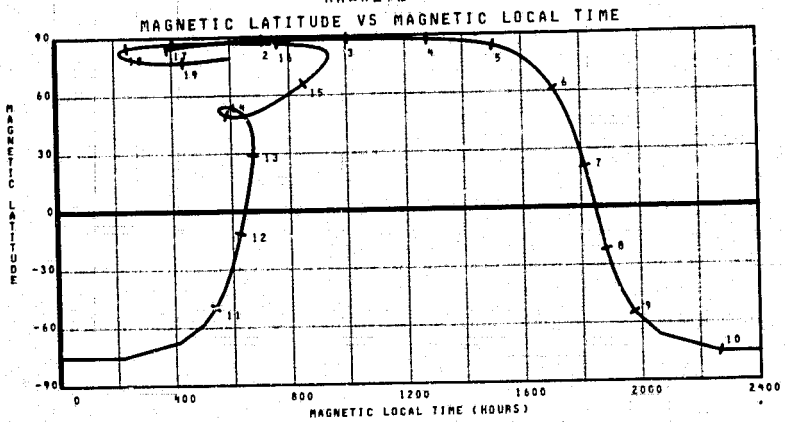
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 90/21.00H TO 1976/ 92/22.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

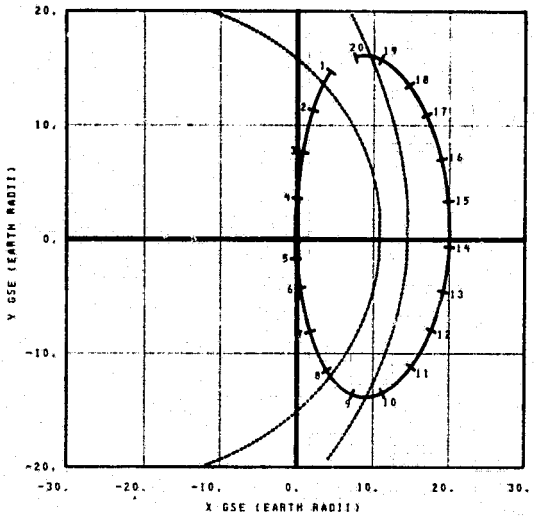
1 - 1976/ 90/ 21.17H	R=	13.4RE	8 - 1976/ 91/	5.33H	R=	2.8RE	15 - 1976/ 92/	5.33H	R=	20.8RE
2 - 1976/ 90/ 22.67H	R=	12.2RE	9 - 1976/ 91/	5.58H	R=	1.7RE	16 - 1976/ 92/	11.33H	R=	19.9RE
3 - 1976/ 90/ 23.00H	R=	11.8RE	10 - 1976/ 91/	5.75H	R=	1.7RE	17 - 1976/ 92/	12.33H	R=	19.7RE
4 - 1976/ 90/ 23.33H	R=	11.5RE	11 - 1976/ 91/	6.08H	R=	2.1RE	18 - 1976/ 92/	15.33H	R=	19.9RE
5 - 1976/ 91/ 0.17H	R=	10.5RE	12 - 1976/ 91/	6.67H	R=	3.3RE	19 - 1976/ 92/	19.83H	R=	16.9RE
6 - 1976/ 91/ 3.00H	R=	6.9RE	13 - 1976/ 91/	8.50H	R=	6.8RE				
7 - 1976/ 91/ 4.75H	R=	3.2RE	14 - 1976/ 91/	19.17H	R=	17.1RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 90 /21.00H TO1976/ 92 /22.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 92/ 22.17H	LAT=	65.5	11 - 1976/ 99/	2.00H	LAT=	79.6
2 - 1976/ 93/ 2.50H	LAT=	55.1	12 - 1976/ 99/	4.00H	LAT=	80.9
3 - 1976/ 93/ 5.50H	LAT=	40.5	13 - 1976/ 99/	5.50H	LAT=	81.4
4 - 1976/ 93/ T...0H	LAT=	6.0	14 - 1976/ 99/	7.00H	LAT=	81.7
5 - 1976/ 93/ 8.92H	LAT=	-79.9	15 - 1976/ 99/	8.50H	LAT=	81.6
6 - 1976/ 93/ 10.33H	LAT=	21.9	16 - 1976/ 99/	10.00H	LAT=	81.2
7 - 1976/ 93/ 12.67H	LAT=	50.8	17 - 1976/ 99/	12.50H	LAT=	80.3
8 - 1976/ 93/ 15.83H	LAT=	63.5	18 - 1976/ 99/	14.00H	LAT=	78.9
9 - 1976/ 93/ 19.67H	LAT=	72.0	19 - 1976/ 99/	17.50H	LAT=	75.9
10 - 1976/ 93/ 23.17H	LAT=	76.9	20 - 1976/ 99/	21.50H	LAT=	71.4

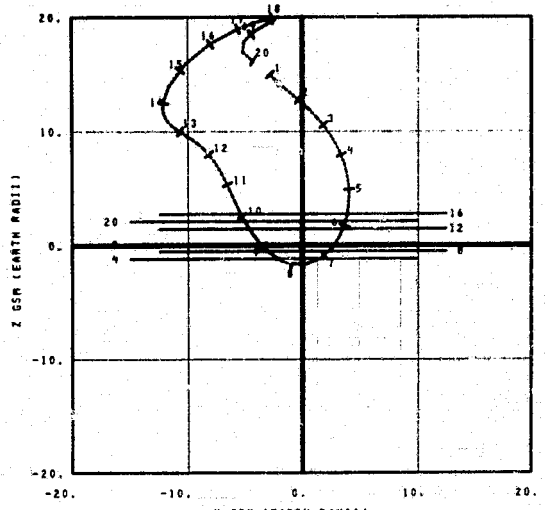
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 92/22.00H TO 1976/ 99/23.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 92/ 22.17H	R=	15.4R_E	11 - 1976/ 93/	12.92H	R=	9.6R_E
2 - 1976/ 93/ 1.17H	R=	12.9R_E	12 - 1976/ 93/	15.33H	R=	11.4R_E
3 - 1976/ 93/ 3.17H	R=	10.8R_E	13 - 1976/ 93/	18.83H	R=	14.0R_E
4 - 1976/ 93/ 4.83H	R=	8.7R_E	14 - 1976/ 93/	23.33H	R=	17.4R_E
5 - 1976/ 93/ 6.33H	R=	6.3R_E	15 - 1976/ 99/	2.50H	R=	18.9R_E
6 - 1976/ 93/ 7.50H	R=	4.0R_E	16 - 1976/ 99/	5.00H	R=	19.6R_E
7 - 1976/ 93/ 8.50H	R=	2.1R_E	17 - 1976/ 99/	7.00H	R=	20.0R_E
8 - 1976/ 93/ 9.17H	R=	1.9R_E	18 - 1976/ 99/	10.50H	R=	20.3R_E
9 - 1976/ 93/ 9.92H	R=	3.8R_E	19 - 1976/ 99/	17.50H	R=	19.2R_E
10 - 1976/ 93/ 11.25H	R=	6.0R_E	20 - 1976/ 99/	23.00H	R=	16.9R_E

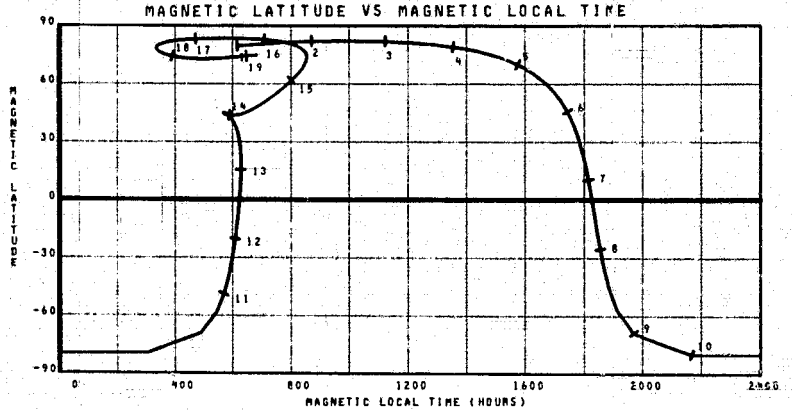
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 92/22.00H TO 1976/ 99/23.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

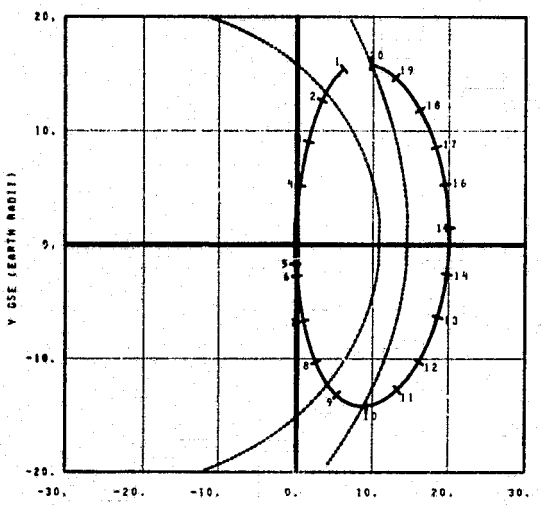
1 - 1976/ 92/ 22.17H	R=	19.4R_E	8 - 1976/ 93/	8.50H	R=	2.1R_E	15 - 1976/ 99/	5.00H	R=	19.6R_E
2 - 1976/ 92/ 23.00H	R=	19.9R_E	9 - 1976/ 93/	8.83H	R=	1.7R_E	16 - 1976/ 99/	11.00H	R=	20.3R_E
3 - 1976/ 93/ 1.17H	R=	17.9R_E	10 - 1976/ 93/	8.92H	R=	1.7R_E	17 - 1976/ 99/	12.50H	R=	20.2R_E
4 - 1976/ 93/ 2.33H	R=	14.7R_E	11 - 1976/ 93/	9.25H	R=	2.0R_E	18 - 1976/ 99/	17.50H	R=	19.2R_E
5 - 1976/ 93/ 4.17H	R=	9.5R_E	12 - 1976/ 93/	9.58H	R=	2.7R_E	19 - 1976/ 99/	22.50H	R=	17.2R_E
6 - 1976/ 93/ 6.67H	R=	5.7R_E	13 - 1976/ 93/	10.17H	R=	4.7R_E				
7 - 1976/ 93/ 8.00H	R=	3.1R_E	14 - 1976/ 93/	19.33H	R=	15.1R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 92 /22.00H TO1976/ 99 /23.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 99/ 23.50 H	LAT=	68.6	11 - 1976/ 96/	4.33 H	LAT=	78.8
2 - 1976/ 95/ 4.17 H	LAT=	59.6	12 - 1976/ 96/	6.33 H	LAT=	80.3
3 - 1976/ 95/ 7.67 H	LAT=	47.1	13 - 1976/ 96/	8.33 H	LAT=	81.3
4 - 1976/ 95/ 10.17 H	LAT=	29.7	14 - 1976/ 96/	9.83 H	LAT=	81.7
5 - 1976/ 95/ 12.17 H	LAT=	-75.5	15 - 1976/ 96/	11.33 H	LAT=	81.7
6 - 1976/ 95/ 12.83 H	LAT=	-6.9	16 - 1976/ 96/	12.83 H	LAT=	81.9
7 - 1976/ 95/ 14.92 H	LAT=	42.3	17 - 1976/ 96/	14.33 H	LAT=	80.8
8 - 1976/ 95/ 17.67 H	LAT=	58.8	18 - 1976/ 96/	16.33 H	LAT=	79.4
9 - 1976/ 95/ 21.33 H	LAT=	69.0	19 - 1976/ 96/	19.33 H	LAT=	77.3
10 - 1976/ 96/ 1.17 H	LAT=	75.3	20 - 1976/ 96/	22.83 H	LAT=	73.7

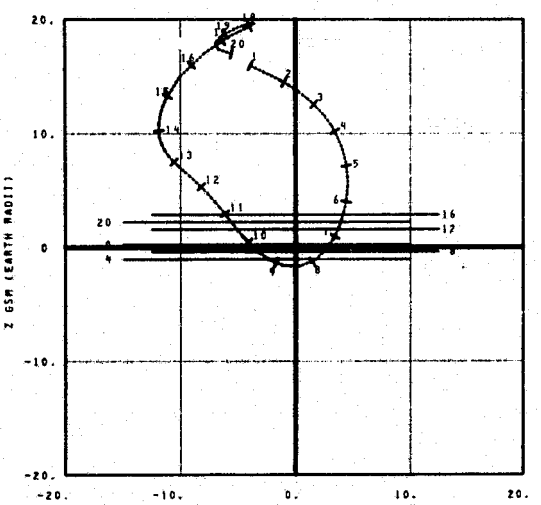
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 99/23.00H TO 1976/ 97/ 0.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 99/ 23.50 H	R=	16.6 R_E	11 - 1976/ 95/	15.00 H	R=	6.9 R_E
2 - 1976/ 95/ 2.33 H	R=	19.6 R_E	12 - 1976/ 95/	17.00 H	R=	9.9 R_E
3 - 1976/ 95/ 4.50 H	R=	12.8 R_E	13 - 1976/ 95/	20.00 H	R=	13.8 R_E
4 - 1976/ 95/ 6.33 H	R=	10.8 R_E	14 - 1976/ 95/	23.50 H	R=	15.8 R_E
5 - 1976/ 95/ 8.17 H	R=	8.5 R_E	15 - 1976/ 96/	2.33 H	R=	17.5 R_E
6 - 1976/ 95/ 9.75 H	R=	6.0 R_E	16 - 1976/ 96/	4.83 H	R=	18.6 R_E
7 - 1976/ 95/ 11.00 H	R=	3.6 R_E	17 - 1976/ 96/	7.33 H	R=	19.4 R_E
8 - 1976/ 95/ 11.83 H	R=	1.9 R_E	18 - 1976/ 96/	10.33 H	R=	20.0 R_E
9 - 1976/ 95/ 12.50 H	R=	2.2 R_E	19 - 1976/ 96/	17.83 H	R=	19.9 R_E
10 - 1976/ 95/ 13.52 H	R=	4.2 R_E	20 - 1976/ 96/	23.83 H	R=	18.1 R_E

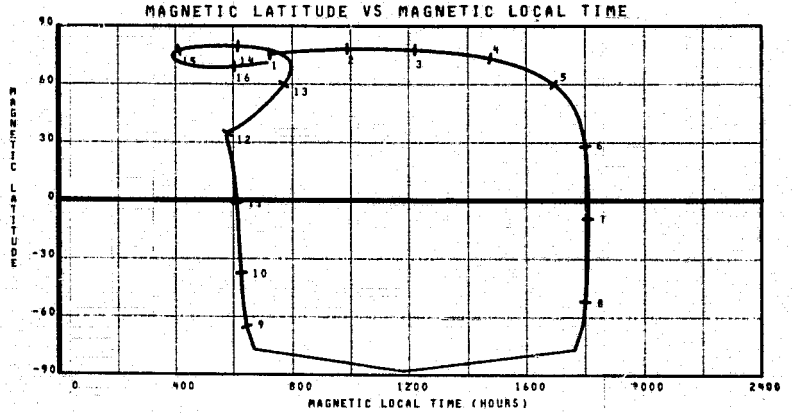
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 99/23.00H TO 1976/ 97/ 0.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

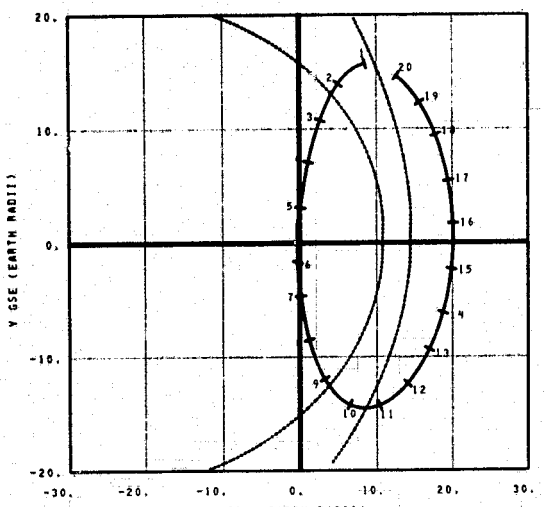
1 - 1976/ 99/ 23.50 H	R=	16.6 R_E	9 - 1976/ 95/	11.92 H	R=	1.8 R_E	15 - 1976/ 96/	13.83 H	R=	20.3 R_E
2 - 1976/ 95/ 2.33 H	R=	19.6 R_E	10 - 1976/ 95/	12.33 H	R=	1.8 R_E	16 - 1976/ 96/	21.83 H	R=	18.9 R_E
3 - 1976/ 95/ 3.33 H	R=	15.8 R_E	11 - 1976/ 95/	12.58 H	R=	2.2 R_E				
4 - 1976/ 95/ 4.17 H	R=	12.1 R_E	12 - 1976/ 95/	13.33 H	R=	3.6 R_E				
5 - 1976/ 95/ 5.83 H	R=	8.9 R_E	13 - 1976/ 95/	17.92 H	R=	10.9 R_E				
6 - 1976/ 95/ 10.58 H	R=	4.0 R_E	14 - 1976/ 96/	8.33 H	R=	18.8 R_E				
7 - 1976/ 95/ 11.58 H	R=	2.5 R_E	15 - 1976/ 96/	11.33 H	R=	20.2 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 99/23.00H TO1976/ 97/ 0.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 97/	0.33H	LAT=	72.0	11 - 1976/ 98/	5.83H	LAT=	77.0
2 - 1976/ 97/	5.33H	LAT=	64.2	12 - 1976/ 98/	8.50H	LAT=	79.5
3 - 1976/ 97/	9.33H	LAT=	53.9	13 - 1976/ 98/	10.50H	LAT=	80.8
4 - 1976/ 97/	12.83H	LAT=	38.1	14 - 1976/ 98/	12.00H	LAT=	81.4
5 - 1976/ 97/	14.42H	LAT=	-3.1	15 - 1976/ 98/	13.50H	LAT=	81.7
6 - 1976/ 97/	15.33H	LAT=	-80.8	16 - 1976/ 98/	15.00H	LAT=	81.6
7 - 1976/ 97/	16.97H	LAT=	25.8	17 - 1976/ 98/	16.50H	LAT=	81.3
8 - 1976/ 97/	19.33H	LAT=	51.3	18 - 1976/ 98/	18.50H	LAT=	80.3
9 - 1976/ 97/	22.50H	LAT=	64.1	19 - 1976/ 98/	20.50H	LAT=	79.0
10 - 1976/ 98/	2.33H	LAT=	72.3	20 - 1976/ 98/	23.50H	LAT=	76.5

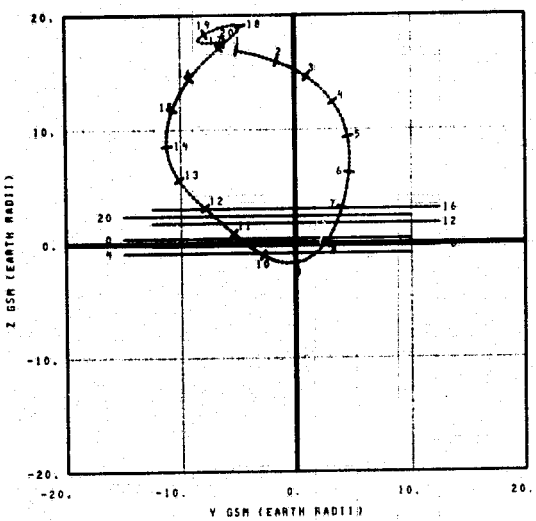
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 97/ 0.00H TO 1976/ 99/ 1.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 97/	0.33H	R=	17.9R_E	11 - 1976/ 97/	17.45H	R=	5.6R_E
2 - 1976/ 97/	3.33H	R=	16.2R_E	12 - 1976/ 97/	19.33H	R=	8.6R_E
3 - 1976/ 97/	5.33H	R=	14.0R_E	13 - 1976/ 97/	21.83H	R=	11.6R_E
4 - 1976/ 97/	7.50H	R=	13.0R_E	14 - 1976/ 98/	0.50H	R=	14.2R_E
5 - 1976/ 97/	9.83H	R=	10.5R_E	15 - 1976/ 98/	3.00H	R=	16.0R_E
6 - 1976/ 97/	11.83H	R=	7.8R_E	16 - 1976/ 98/	5.17H	R=	17.3R_E
7 - 1976/ 97/	13.42H	R=	5.2R_E	17 - 1976/ 98/	8.00H	R=	18.4R_E
8 - 1976/ 97/	14.67H	R=	2.6R_E	18 - 1976/ 98/	12.50H	R=	19.9R_E
9 - 1976/ 97/	15.42H	R=	1.7R_E	19 - 1976/ 98/	18.50H	R=	20.2R_E
10 - 1976/ 97/	16.20H	R=	3.0R_E	20 - 1976/ 99/	1.00H	R=	18.9R_E

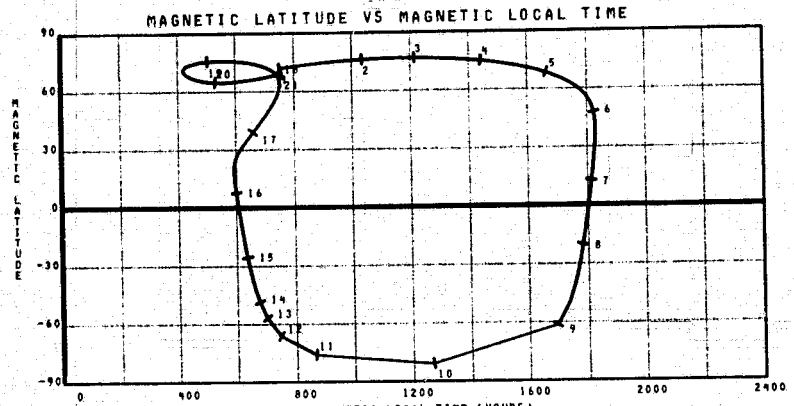
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 97/ 0.00H TO 1976/ 99/ 1.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

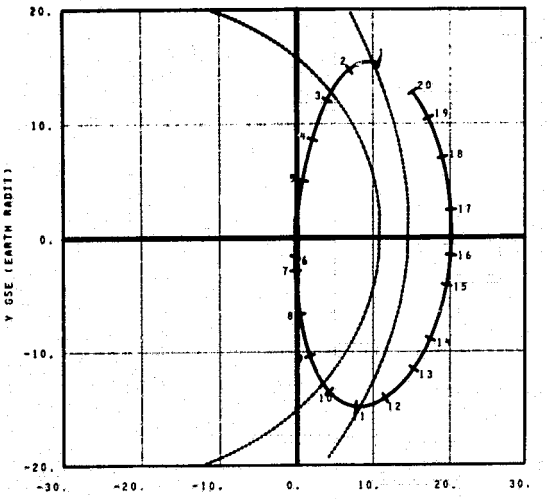
1 - 1976/ 97/	0.33H	R=	17.9R_E	8 - 1976/ 97/	14.92H	R=	2.1R_E	15 - 1976/ 97/	16.67H	R=	2.6R_E
2 - 1976/ 97/	3.33H	R=	16.2R_E	9 - 1976/ 97/	15.25H	R=	1.7R_E	16 - 1976/ 97/	17.50H	R=	5.3R_E
3 - 1976/ 97/	4.67H	R=	15.3R_E	10 - 1976/ 97/	15.42H	R=	1.7R_E	17 - 1976/ 98/	1.00H	R=	14.6R_E
4 - 1976/ 97/	6.33H	R=	14.0R_E	11 - 1976/ 97/	15.58H	R=	1.8R_E	18 - 1976/ 98/	8.50H	R=	18.8R_E
5 - 1976/ 97/	8.67H	R=	11.8R_E	12 - 1976/ 97/	15.58H	R=	1.9R_E	19 - 1976/ 98/	12.50H	R=	19.9R_E
6 - 1976/ 97/	12.50H	R=	6.6R_E	13 - 1976/ 97/	15.67H	R=	2.0R_E	20 - 1976/ 98/	20.00H	R=	20.1R_E
7 - 1976/ 97/	14.42H	R=	3.1R_E	14 - 1976/ 97/	15.75H	R=	2.1R_E	21 - 1976/ 99/	1.00H	R=	18.9R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 97 / 0.00H TO1976/ 99 / 1.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 99/	1.50 H	LAT=	74.4	11 - 1976/100/	7.33 H	LAT=	74.9
2 - 1976/ 99/	6.50 H	LAT=	67.9	12 - 1976/100/	10.33 H	LAT=	78.3
3 - 1976/ 99/	11.00 H	LAT=	58.8	13 - 1976/100/	12.83 H	LAT=	80.3
4 - 1976/ 99/	14.33 H	LAT=	46.1	14 - 1976/100/	14.33 H	LAT=	81.1
5 - 1976/ 99/	16.67 H	LAT=	23.8	15 - 1976/100/	16.33 H	LAT=	81.7
6 - 1976/ 99/	18.50 H	LAT=	-77.4	16 - 1976/100/	17.33 H	LAT=	81.7
7 - 1976/ 99/	19.33 H	LAT=	-2.5	17 - 1976/100/	18.83 H	LAT=	81.5
8 - 1976/ 99/	21.33 H	LAT=	42.1	18 - 1976/100/	20.83 H	LAT=	80.8
9 - 1976/ 99/	23.00 H	LAT=	58.3	19 - 1976/100/	22.83 H	LAT=	79.7
10 - 1976/100/	3.67 H	LAT=	68.7	20 - 1976/101/	0.83 H	LAT=	78.2

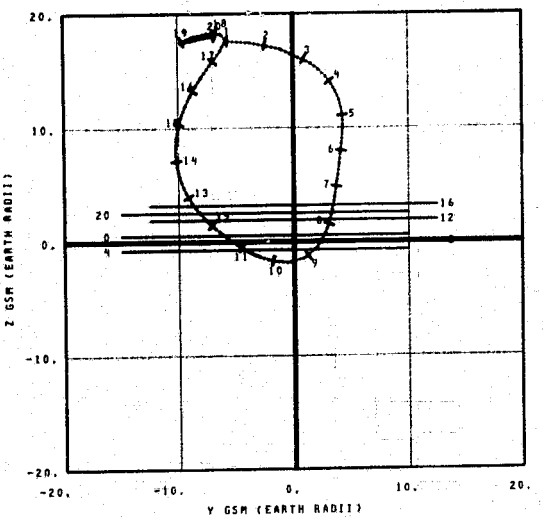
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/ 99/ 1.00H TO 1976/101/ 2.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/ 99/	1.50 H	R=	18.7 R_E	11 - 1976/ 99/	20.15 H	R=	9.4 R_E
2 - 1976/ 99/	4.00 H	R=	17.7 R_E	12 - 1976/ 99/	21.67 H	R=	7.3 R_E
3 - 1976/ 99/	6.50 H	R=	16.3 R_E	13 - 1976/ 99/	23.50 H	R=	9.9 R_E
4 - 1976/ 99/	8.83 H	R=	14.6 R_E	14 - 1976/100/	1.83 H	R=	12.5 R_E
5 - 1976/ 99/	11.67 H	R=	12.0 R_E	15 - 1976/100/	4.00 H	R=	14.9 R_E
6 - 1976/ 99/	14.17 H	R=	9.1 R_E	16 - 1976/100/	6.17 H	R=	16.8 R_E
7 - 1976/ 99/	16.08 H	R=	6.2 R_E	17 - 1976/100/	8.67 H	R=	17.9 R_E
8 - 1976/ 99/	17.50 H	R=	3.4 R_E	18 - 1976/100/	10.83 H	R=	19.7 R_E
9 - 1976/ 99/	18.42 H	R=	1.7 R_E	19 - 1976/100/	19.83 H	R=	20.3 R_E
10 - 1976/ 99/	19.17 H	R=	2.5 R_E	20 - 1976/101/	1.83 H	R=	19.6 R_E

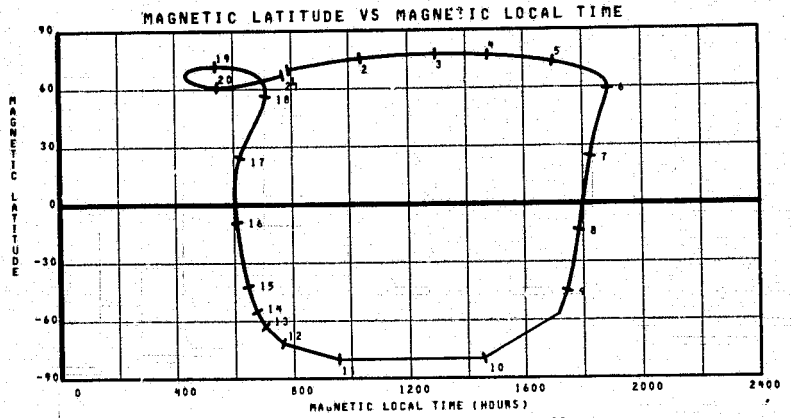
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/ 99/ 1.00H TO 1976/101/ 2.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

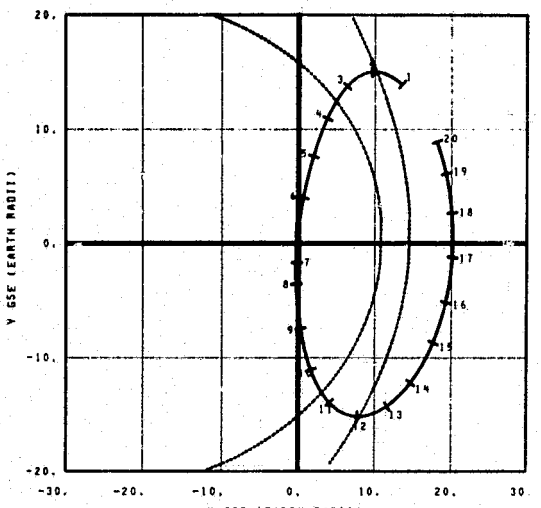
1 - 1976/ 99/	1.50 H	R=	18.7 R_E	8 - 1976/ 99/	18.17 H	R=	2.1 R_E	15 - 1976/ 99/	19.17 H	R=	2.5 R_E
2 - 1976/ 99/	4.50 H	R=	17.4 R_E	9 - 1976/ 99/	18.42 H	R=	1.7 R_E	16 - 1976/ 99/	20.83 H	R=	4.3 R_E
3 - 1976/ 99/	6.50 H	R=	16.3 R_E	10 - 1976/ 99/	18.67 H	R=	1.7 R_E	17 - 1976/ 99/	23.75 H	R=	10.2 R_E
4 - 1976/ 99/	7.83 H	R=	15.4 R_E	11 - 1976/ 99/	18.75 H	R=	1.8 R_E	18 - 1976/100/	6.33 H	R=	16.1 R_E
5 - 1976/ 99/	10.08 H	R=	13.6 R_E	12 - 1976/ 99/	18.83 H	R=	1.9 R_E	19 - 1976/100/	11.83 H	R=	18.8 R_E
6 - 1976/ 99/	12.00 H	R=	7.9 R_E	13 - 1976/ 99/	18.92 H	R=	2.0 R_E	20 - 1976/100/	20.33 H	R=	20.3 R_E
7 - 1976/ 99/	17.50 H	R=	3.2 R_E	14 - 1976/ 99/	19.00 H	R=	2.2 R_E	21 - 1976/101/	1.83 H	R=	19.6 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/ 99 / 1.00H TO1976/101 / 2.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/101/	2.33 H	LAT=	76.9	11 - 1976/102/	7.33 H	LAT=	69.6
2 - 1976/101/	6.83 H	LAT=	72.0	12 - 1976/102/	11.00 H	LAT=	75.4
3 - 1976/101/	11.33 H	LAT=	65.2	13 - 1976/102/	14.00 H	LAT=	78.7
4 - 1976/101/	15.33 H	LAT=	55.6	14 - 1976/102/	16.00 H	LAT=	80.2
5 - 1976/101/	18.25 H	LAT=	41.7	15 - 1976/102/	18.00 H	LAT=	81.3
6 - 1976/101/	20.42 H	LAT=	12.5	16 - 1976/102/	19.50 H	LAT=	81.7
7 - 1976/101/	21.75 H	LAT=	-81.6	17 - 1976/102/	21.00 H	LAT=	81.7
8 - 1976/101/	22.67 H	LAT=	11.5	18 - 1976/102/	22.92 H	LAT=	81.4
9 - 1976/102/	1.00 H	LAT=	46.8	19 - 1976/102/	24.00 H	LAT=	80.9
10 - 1976/102/	3.03 H	LAT=	60.6	20 - 1976/103/	1.50 H	LAT=	80.6

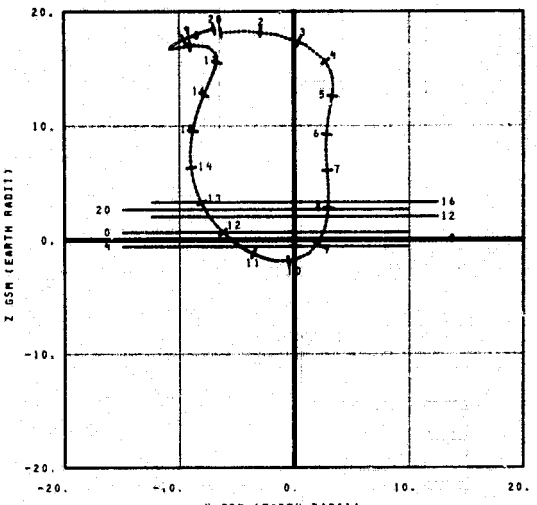
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/101/ 2.00H TO 1976/103/ 3.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/101/	2.33 H	R=	19.5 R_E	11 - 1976/101/	22.97 H	R=	3.0 R_E
2 - 1976/101/	6.83 H	R=	18.7 R_E	12 - 1976/102/	0.25 H	R=	6.2 R_E
3 - 1976/101/	7.33 H	R=	17.6 R_E	13 - 1976/102/	1.83 H	R=	8.7 R_E
4 - 1976/101/	10.00 H	R=	16.1 R_E	14 - 1976/102/	3.67 H	R=	11.0 R_E
5 - 1976/101/	13.67 H	R=	13.2 R_E	15 - 1976/102/	5.67 H	R=	13.0 R_E
6 - 1976/101/	16.83 H	R=	9.0 R_E	16 - 1976/102/	8.00 H	R=	15.0 R_E
7 - 1976/101/	18.92 H	R=	6.8 R_E	17 - 1976/102/	11.17 H	R=	17.1 R_E
8 - 1976/101/	20.92 H	R=	4.8 R_E	18 - 1976/102/	17.00 H	R=	19.9 R_E
9 - 1976/101/	21.92 H	R=	2.8 R_E	19 - 1976/103/	0.58 H	R=	20.3 R_E
10 - 1976/101/	22.88 H	R=	2.8 R_E	20 - 1976/103/	3.00 H	R=	20.8 R_E

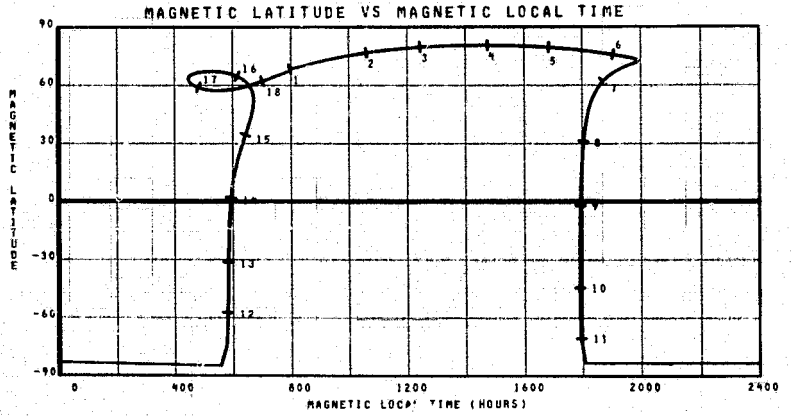
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/101/ 2.00H TO 1976/103/ 3.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

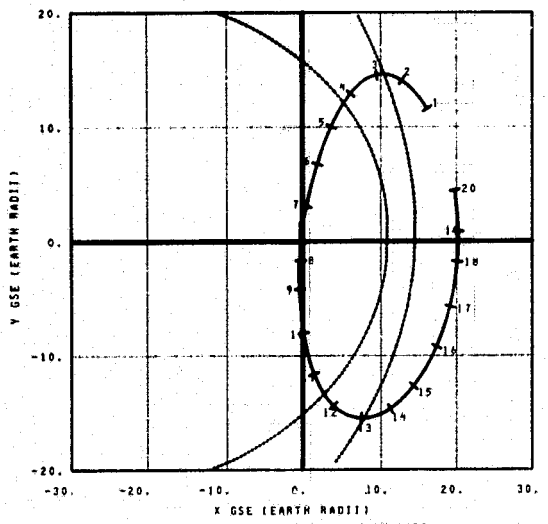
1 - 1976/101/	2.33 H	R=	19.5 R_E	8 - 1976/101/	20.03 H	R=	3.2 R_E	15 - 1976/102/	3.58 H	R=	18.9 R_E
2 - 1976/101/	5.83 H	R=	18.3 R_E	9 - 1976/101/	21.33 H	R=	2.1 R_E	16 - 1976/102/	9.83 H	R=	16.3 R_E
3 - 1976/101/	7.33 H	R=	17.6 R_E	10 - 1976/101/	21.67 H	R=	1.7 R_E	17 - 1976/102/	18.00 H	R=	19.7 R_E
4 - 1976/101/	8.83 H	R=	16.8 R_E	11 - 1976/101/	21.83 H	R=	1.7 R_E	18 - 1976/103/	1.00 H	R=	20.8 R_E
5 - 1976/101/	10.33 H	R=	15.9 R_E	12 - 1976/101/	22.25 H	R=	2.3 R_E				
6 - 1976/101/	13.00 H	R=	13.8 R_E	13 - 1976/101/	22.45 H	R=	3.1 R_E				
7 - 1976/101/	19.33 H	R=	6.1 R_E	14 - 1976/102/	23.92 H	R=	9.6 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/101 / 2.00H TO1976/103 / 3.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/103/	3.50 H	LAT=	78.6	11 - 1976/104/	7.50 H	LAT=	62.1
2 - 1976/103/	7.00 H	LAT=	75.5	12 - 1976/104/	11.00 H	LAT=	70.4
3 - 1976/103/	11.00 H	LAT=	70.9	13 - 1976/104/	14.50 H	LAT=	75.8
4 - 1976/103/	15.67 H	LAT=	63.1	14 - 1976/104/	17.33 H	LAT=	78.8
5 - 1976/103/	19.33 H	LAT=	52.9	15 - 1976/104/	19.33 H	LAT=	80.3
6 - 1976/103/	22.00 H	LAT=	37.6	16 - 1976/104/	21.33 H	LAT=	81.3
7 - 1976/104/	0.00 H	LAT=	-3.3	17 - 1976/104/	22.83 H	LAT=	81.7
8 - 1976/104/	1.00 H	LAT=	-79.5	18 - 1976/105/	0.33 H	LAT=	81.7
9 - 1976/104/	2.38 H	LAT=	88.5	19 - 1976/105/	1.33 H	LAT=	81.5
10 - 1976/104/	4.58 H	LAT=	98.8	20 - 1976/105/	2.03 H	LAT=	81.6

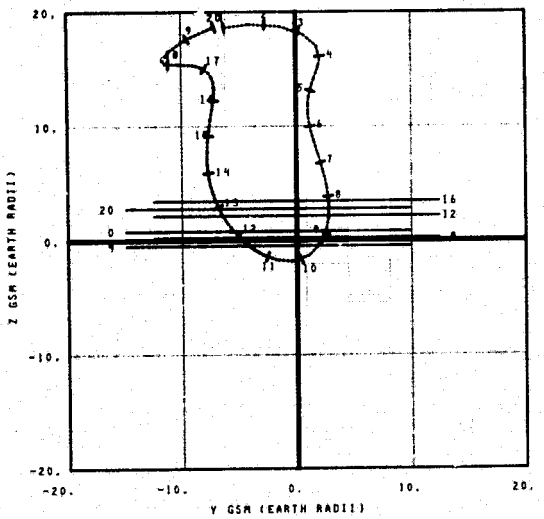
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/103/ 3.00H TO 1976/105/ 4.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/103/	3.50 H	R=	19.9 RE	11 - 1976/104/	1.83 H	R=	3.0 RE
2 - 1976/103/	6.00 H	R=	19.4 RE	12 - 1976/104/	2.92 H	R=	5.2 RE
3 - 1976/103/	8.50 H	R=	18.5 RE	13 - 1976/104/	4.25 H	R=	7.5 RE
4 - 1976/103/	12.50 H	R=	16.5 RE	14 - 1976/104/	5.83 H	R=	9.7 RE
5 - 1976/103/	16.67 H	R=	13.4 RE	15 - 1976/104/	7.83 H	R=	12.0 RE
6 - 1976/103/	19.67 H	R=	10.3 RE	16 - 1976/104/	10.33 H	R=	14.3 RE
7 - 1976/103/	21.83 H	R=	7.3 RE	17 - 1976/104/	14.50 H	R=	17.1 RE
8 - 1976/103/	23.25 H	R=	4.8 RE	18 - 1976/104/	19.33 H	R=	19.2 RE
9 - 1976/104/	0.33 H	R=	2.6 RE	19 - 1976/105/	1.83 H	R=	20.3 RE
10 - 1976/104/	1.08 H	R=	1.7 RE	20 - 1976/105/	3.83 H	R=	20.2 RE

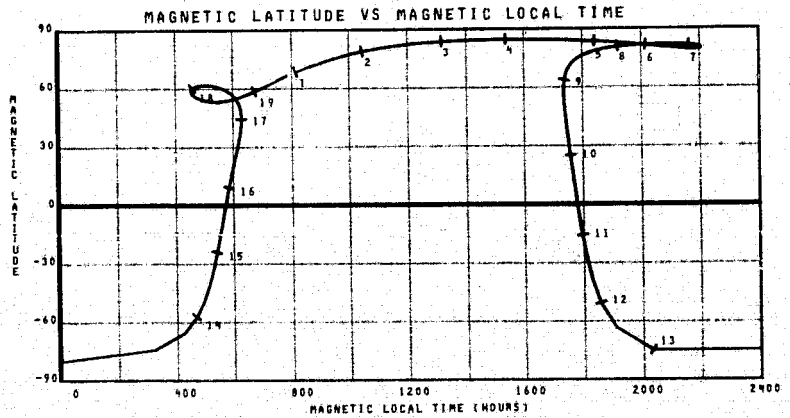
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/103/ 3.00H TO 1976/105/ 4.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

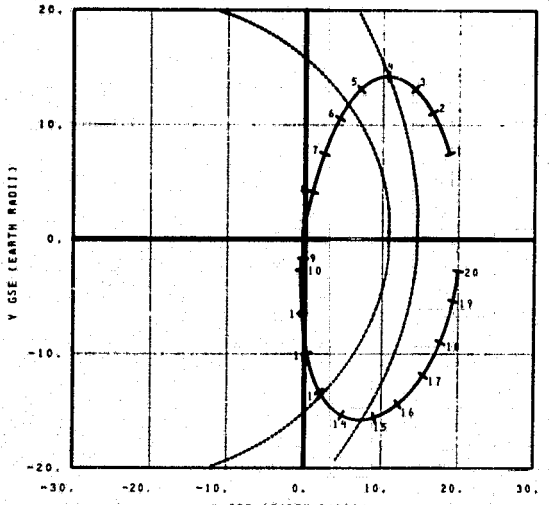
1 - 1976/103/	3.50 H	R=	19.9 RE	8 - 1976/103/	20.50 H	R=	9.2 RE	15 - 1976/104/	1.92 H	R=	3.2 RE
2 - 1976/103/	7.00 H	R=	19.1 RE	9 - 1976/103/	22.75 H	R=	5.0 RE	16 - 1976/104/	3.17 H	R=	5.7 RE
3 - 1976/103/	9.00 H	R=	18.3 RE	10 - 1976/104/	0.17 H	R=	2.9 RE	17 - 1976/104/	4.83 H	R=	10.9 RE
4 - 1976/103/	10.60 H	R=	17.9 RE	11 - 1976/104/	0.67 H	R=	1.9 RE	18 - 1976/104/	14.33 H	R=	17.0 RE
5 - 1976/103/	11.90 H	R=	17.1 RE	12 - 1976/104/	0.92 H	R=	1.7 RE	19 - 1976/105/	0.83 H	R=	20.2 RE
6 - 1976/103/	13.00 H	R=	16.2 RE	13 - 1976/104/	1.00 H	R=	1.7 RE				
7 - 1976/103/	18.67 H	R=	11.4 RE	14 - 1976/104/	1.42 H	R=	2.2 RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/103 / 3.00H TO1976/103 / 4.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/105/	4.33 H	LAT=	80.3	11 - 1976/106/	6.83 H	LAT=	40.5
2 - 1976/105/	6.83 H	LAT=	78.4	12 - 1976/106/	9.25 H	LAT=	56.6
3 - 1976/105/	9.33 H	LAT=	76.9	13 - 1976/106/	12.50 H	LAT=	66.9
4 - 1976/105/	13.33 H	LAT=	72.0	14 - 1976/106/	16.08 H	LAT=	73.9
5 - 1976/105/	18.00 H	LAT=	64.9	15 - 1976/106/	19.50 H	LAT=	77.8
6 - 1976/105/	21.83 H	LAT=	55.5	16 - 1976/106/	21.50 H	LAT=	79.5
7 - 1976/106/	0.67 H	LAT=	42.0	17 - 1976/106/	23.50 H	LAT=	80.3
8 - 1976/106/	2.75 H	LAT=	15.3	18 - 1976/107/	1.00 H	LAT=	81.4
9 - 1976/106/	4.25 H	LAT=	-76.0	19 - 1976/107/	2.50 H	LAT=	81.7
10 - 1976/106/	4.93 H	LAT=	-5.5	20 - 1976/107/	3.50 H	LAT=	81.7

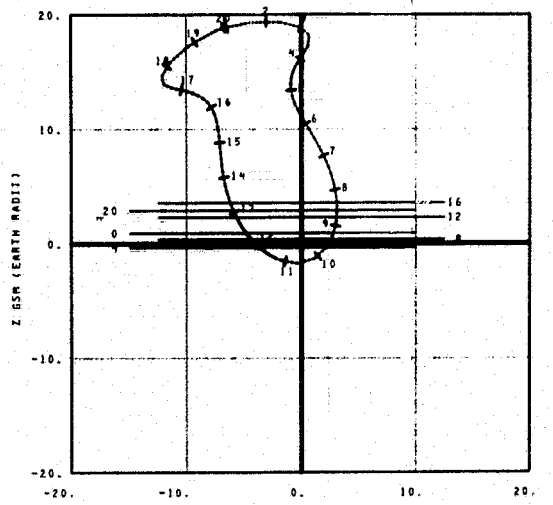
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/105/ 4.00H TO 1976/107/ 5.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/105/	4.33 H	R=	20.2 R_E	11 - 1976/106/	4.67 H	R=	2.2 R_E
2 - 1976/105/	6.83 H	R=	19.9 R_E	12 - 1976/106/	5.57 H	R=	4.1 R_E
3 - 1976/105/	9.83 H	R=	19.2 R_E	13 - 1976/106/	6.83 H	R=	6.5 R_E
4 - 1976/105/	13.83 H	R=	16.5 R_E	14 - 1976/106/	8.42 H	R=	8.9 R_E
5 - 1976/105/	19.50 H	R=	13.8 R_E	15 - 1976/106/	10.92 H	R=	11.3 R_E
6 - 1976/105/	22.50 H	R=	10.7 R_E	16 - 1976/106/	13.58 H	R=	14.3 R_E
7 - 1976/106/	0.58 H	R=	8.1 R_E	17 - 1976/106/	17.67 H	R=	17.1 R_E
8 - 1976/106/	2.00 H	R=	5.7 R_E	18 - 1976/106/	24.00 H	R=	19.6 R_E
9 - 1976/106/	3.17 H	R=	3.9 R_E	19 - 1976/107/	3.00 H	R=	20.1 R_E
10 - 1976/106/	4.00 H	R=	1.8 R_E	20 - 1976/107/	5.00 H	R=	20.3 R_E

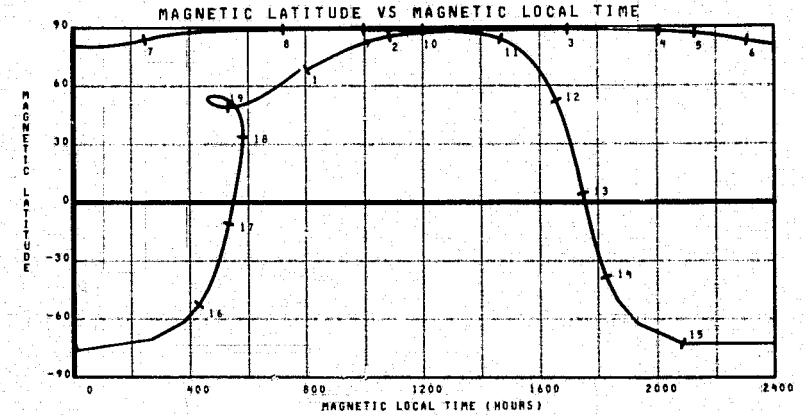
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/105/ 4.00H TO 1976/107/ 5.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

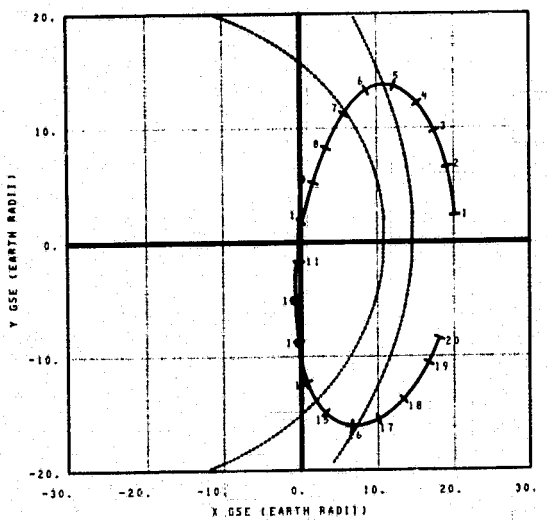
1 - 1976/105/	4.33 H	R=	20.2 R_E	8 - 1976/105/	21.67 H	R=	11.7 R_E	15 - 1976/106/	4.25 H	R=	1.7 R_E
2 - 1976/105/	6.33 H	R=	19.3 R_E	9 - 1976/105/	21.83 H	R=	11.5 R_E	16 - 1976/106/	4.58 H	R=	2.1 R_E
3 - 1976/105/	10.83 H	R=	18.9 R_E	10 - 1976/105/	22.00 H	R=	11.3 R_E	17 - 1976/106/	5.33 H	R=	3.9 R_E
4 - 1976/105/	11.33 H	R=	18.7 R_E	11 - 1976/105/	23.00 H	R=	10.1 R_E	18 - 1976/106/	7.58 H	R=	7.7 R_E
5 - 1976/105/	11.83 H	R=	18.5 R_E	12 - 1976/106/	2.25 H	R=	5.2 R_E	19 - 1976/106/	20.00 H	R=	18.8 R_E
6 - 1976/105/	13.83 H	R=	17.6 R_E	13 - 1976/106/	3.50 H	R=	2.5 R_E				
7 - 1976/105/	19.83 H	R=	13.5 R_E	14 - 1976/106/	4.00 H	R=	1.8 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/105 / 4.00H TO1976/107 / 5.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/107/	5.50 H	LAT=	81.3	11 - 1976/108/	7.92 H	LAT=	-81.1
2 - 1976/107/	7.50 H	LAT=	80.4	12 - 1976/108/	9.26 H	LAT=	30.0
3 - 1976/107/	9.50 H	LAT=	79.0	13 - 1976/108/	11.50 H	LAT=	51.6
4 - 1976/107/	12.00 H	LAT=	77.0	14 - 1976/108/	14.50 H	LAT=	63.6
5 - 1976/107/	15.50 H	LAT=	73.3	15 - 1976/108/	18.00 H	LAT=	71.9
6 - 1976/107/	20.00 H	LAT=	67.1	16 - 1976/108/	21.33 H	LAT=	74.2
7 - 1976/107/	24.00 H	LAT=	58.6	17 - 1976/108/	23.83 H	LAT=	78.8
8 - 1976/108/	3.17 H	LAT=	46.9	18 - 1976/109/	1.83 H	LAT=	80.3
9 - 1976/108/	5.33 H	LAT=	27.3	19 - 1976/109/	3.83 H	LAT=	81.3
10 - 1976/108/	7.17 H	LAT=	-55.4	20 - 1976/109/	4.83 H	LAT=	81.6

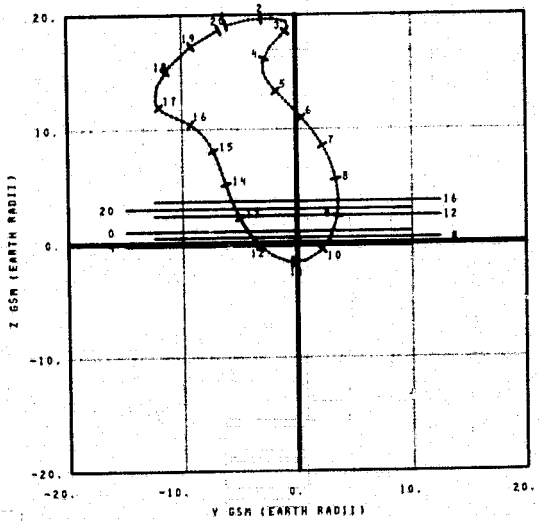
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/107/ 5.00H TO 1976/109/ 6.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/107/	5.50 H	R=	20.3 R_E	11 - 1976/108/	7.50 H	R=	1.8 R_E
2 - 1976/107/	6.00 H	R=	20.2 R_E	12 - 1976/108/	8.42 H	R=	3.3 R_E
3 - 1976/107/	14.00 H	R=	18.9 R_E	13 - 1976/108/	9.50 H	R=	5.5 R_E
4 - 1976/107/	18.50 H	R=	16.8 R_E	14 - 1976/108/	11.08 H	R=	8.1 R_E
5 - 1976/107/	22.67 H	R=	13.6 R_E	15 - 1976/108/	13.25 H	R=	10.9 R_E
6 - 1976/108/	1.17 H	R=	11.4 R_E	16 - 1976/1C3/	16.33 H	R=	14.0 R_E
7 - 1976/108/	3.00 H	R=	9.1 R_E	17 - 1976/108/	20.67 H	R=	17.0 R_E
8 - 1976/108/	4.50 H	R=	6.8 R_E	18 - 1976/109/	1.33 H	R=	19.8 R_E
9 - 1976/108/	5.92 H	R=	4.4 R_E	19 - 1976/109/	3.83 H	R=	19.7 R_E
10 - 1976/108/	6.92 H	R=	2.3 R_E	20 - 1976/109/	5.83 H	R=	20.1 R_E

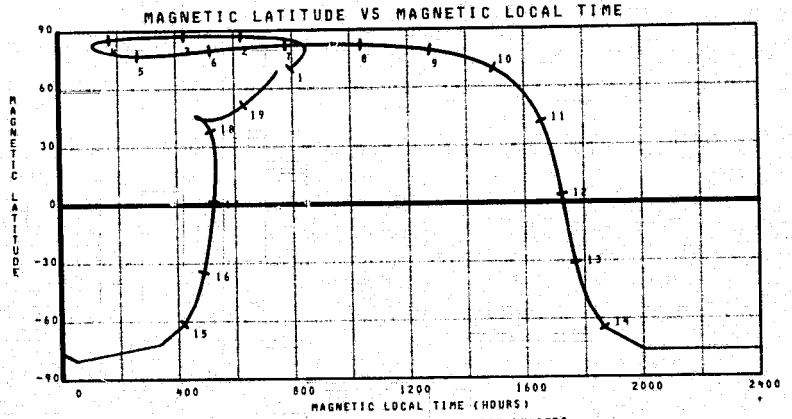
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/107/ 5.00H TO 1976/109/ 6.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

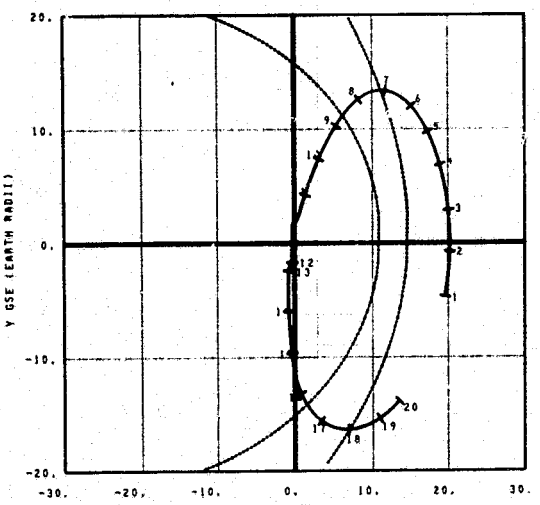
1 - 1976/107/	5.50 H	R=	20.3 R_E	8 - 1976/107/	24.00 H	R=	12.6 R_E	15 - 1976/108/	7.67 H	R=	1.9 R_E
2 - 1976/107/	10.50 H	R=	19.8 R_E	9 - 1976/108/	1.17 H	R=	11.4 R_E	16 - 1976/108/	7.92 H	R=	2.3 R_E
3 - 1976/107/	11.00 H	R=	19.7 R_E	10 - 1976/108/	3.00 H	R=	9.1 R_E	17 - 1976/108/	8.58 H	R=	3.7 R_E
4 - 1976/107/	12.00 H	R=	19.5 R_E	11 - 1976/108/	5.50 H	R=	5.2 R_E	18 - 1976/108/	11.00 H	R=	8.1 R_E
5 - 1976/107/	17.50 H	R=	17.3 R_E	12 - 1976/108/	6.47 H	R=	3.9 R_E	19 - 1976/109/	0.83 H	R=	18.9 R_E
6 - 1976/107/	21.00 H	R=	15.1 R_E	13 - 1976/108/	7.00 H	R=	2.9 R_E				
7 - 1976/107/	22.83 H	R=	13.7 R_E	14 - 1976/108/	7.33 H	R=	1.7 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/107 / 5.00H TO1976/109 / 6.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/109/	6.33H	LAT=	81.8	11 - 1976/110/	9.00H	LAT=	17.5
2 - 1976/109/	7.83H	LAT=	81.4	12 - 1976/110/	10.67H	LAT=	-77.8
3 - 1976/109/	9.33H	LAT=	81.1	13 - 1976/110/	11.25H	LAT=	-13.2
4 - 1976/109/	11.33H	LAT=	80.8	14 - 1976/110/	13.00H	LAT=	37.2
5 - 1976/109/	13.33H	LAT=	78.4	15 - 1976/110/	15.42H	LAT=	55.2
6 - 1976/109/	15.83H	LAT=	76.9	16 - 1976/110/	18.67H	LAT=	66.1
7 - 1976/109/	19.83H	LAT=	72.0	17 - 1976/110/	22.17H	LAT=	72.8
8 - 1976/110/	0.33H	LAT=	65.2	18 - 1976/111/	1.33H	LAT=	77.0
9 - 1976/110/	4.17H	LAT=	53.8	19 - 1976/111/	4.00H	LAT=	79.5
10 - 1976/110/	7.00H	LAT=	42.7	20 - 1976/111/	9.50H	LAT=	80.6

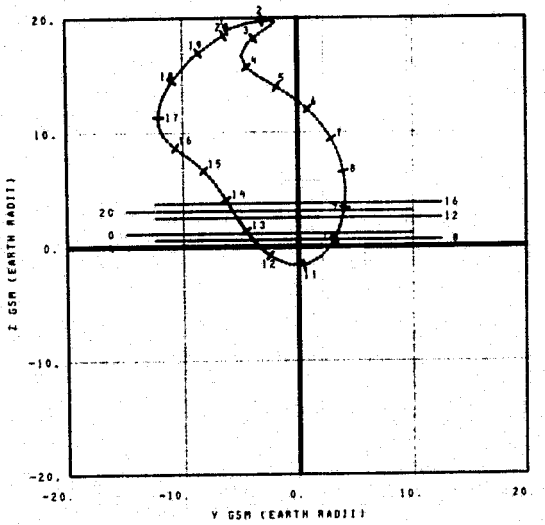
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/109/ 6.00H TO 1976/111/ 7.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/109/	6.33H	R=	20.1RE	11 - 1976/110/	10.50H	R=	1.7RE
2 - 1976/109/	9.33H	R=	20.3RE	12 - 1976/110/	11.33H	R=	2.7RE
3 - 1976/109/	16.83H	R=	19.6RE	13 - 1976/110/	12.33H	R=	4.6RE
4 - 1976/109/	21.83H	R=	16.7RE	14 - 1976/110/	13.92H	R=	7.5RE
5 - 1976/110/	1.00H	R=	14.9RE	15 - 1976/110/	16.17H	R=	10.4RE
6 - 1976/110/	3.33H	R=	12.5RE	16 - 1976/110/	19.33H	R=	13.0RE
7 - 1976/110/	5.33H	R=	10.3RE	17 - 1976/110/	23.33H	R=	16.7RE
8 - 1976/110/	7.00H	R=	8.0RE	18 - 1976/111/	2.50H	R=	18.3RE
9 - 1976/110/	8.50H	R=	5.6RE	19 - 1976/111/	5.00H	R=	19.2RE
10 - 1976/110/	9.67H	R=	3.2RE	20 - 1976/111/	7.00H	R=	19.7RE

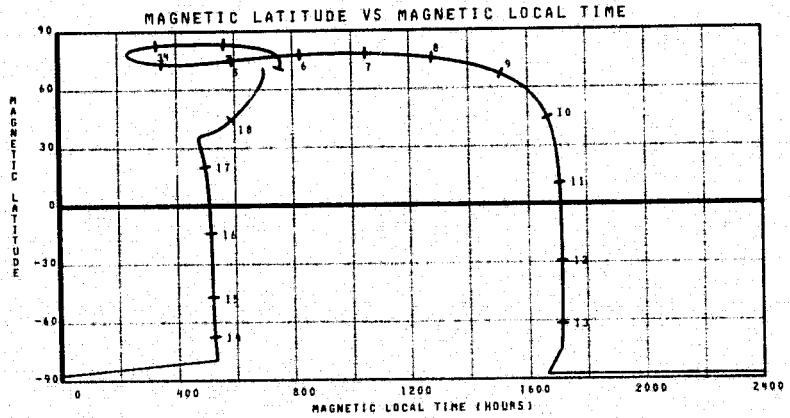
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/109/ 6.00H TO 1976/111/ 7.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

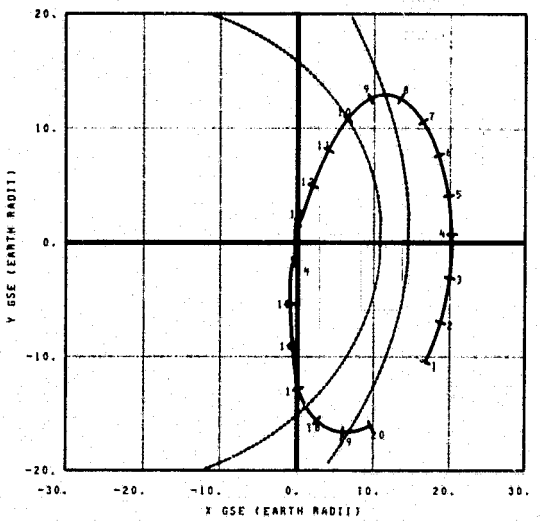
1 - 1976/109/	6.33H	R=	20.1RE	8 - 1976/110/	3.17H	R=	12.6RE	15 - 1976/110/	11.00H	R=	2.0RE
2 - 1976/109/	10.33H	R=	20.2RE	9 - 1976/110/	5.33H	R=	10.3RE	16 - 1976/110/	11.93H	R=	2.9RE
3 - 1976/109/	11.83H	R=	20.1RE	10 - 1976/110/	8.17H	R=	6.2RE	17 - 1976/110/	12.77H	R=	5.6RE
4 - 1976/109/	17.83H	R=	18.6RE	11 - 1976/110/	9.67H	R=	3.2RE	18 - 1976/110/	23.67H	R=	16.9RE
5 - 1976/109/	21.83H	R=	16.7RE	12 - 1976/110/	10.25H	R=	2.1RE				
6 - 1976/110/	0.17H	R=	15.2RE	13 - 1976/110/	10.50H	R=	1.7RE				
7 - 1976/110/	1.67H	R=	14.0RE	14 - 1976/110/	10.83H	R=	1.0RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/109 / 6.00H TO1976/111 / 7.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/111/	7.50 H	LAT=	81.5	11 - 1976/112/	9.50 H	LAT=	47.1
2 - 1976/111/	9.00 H	LAT=	81.7	12 - 1976/112/	11.83 H	LAT=	26.2
3 - 1976/111/	10.50 H	LAT=	81.7	13 - 1976/112/	13.67 H	LAT=	-64.7
4 - 1976/111/	12.00 H	LAT=	81.3	14 - 1976/112/	15.00 H	LAT=	-61.8
5 - 1976/111/	13.50 H	LAT=	80.7	15 - 1976/112/	19.92 H	LAT=	33.0
6 - 1976/111/	15.50 H	LAT=	79.5	16 - 1976/112/	10.17 H	LAT=	52.8
7 - 1976/111/	18.00 H	LAT=	77.5	17 - 1976/112/	21.50 H	LAT=	65.0
8 - 1976/111/	21.50 H	LAT=	73.9	18 - 1976/113/	1.17 H	LAT=	72.9
9 - 1976/112/	2.50 H	LAT=	67.1	19 - 1976/113/	4.33 H	LAT=	76.7
10 - 1976/112/	6.33 H	LAT=	59.0	20 - 1976/113/	6.83 H	LAT=	79.2

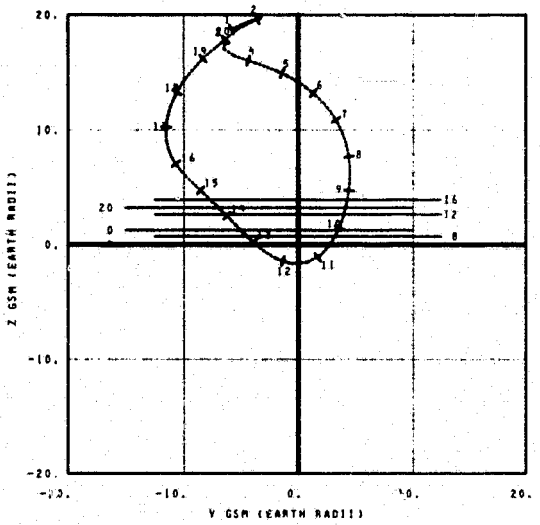
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/111/ 7.00H TO 1976/113/ 8.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/111/	7.50 H	R=	19.0 R_E	11 - 1976/112/	13.50 H	R=	2.0 R_E
2 - 1976/111/	19.00 H	R=	20.2 R_E	12 - 1976/112/	14.25 H	R=	2.5 R_E
3 - 1976/111/	19.00 H	R=	19.3 R_E	13 - 1976/112/	15.10 H	R=	4.0 R_E
4 - 1976/112/	0.50 H	R=	17.0 R_E	14 - 1976/112/	16.67 H	R=	6.0 R_E
5 - 1976/112/	3.00 H	R=	15.0 R_E	15 - 1976/112/	18.75 H	R=	9.0 R_E
6 - 1976/112/	9.17 H	R=	13.7 R_E	16 - 1976/112/	21.50 H	R=	12.8 R_E
7 - 1976/112/	7.17 H	R=	11.8 R_E	17 - 1976/113/	0.67 H	R=	15.4 R_E
8 - 1976/112/	9.33 H	R=	9.3 R_E	18 - 1976/113/	3.17 H	R=	17.6 R_E
9 - 1976/112/	11.00 H	R=	6.8 R_E	19 - 1976/113/	5.83 H	R=	18.3 R_E
10 - 1976/112/	12.50 H	R=	4.0 R_E	20 - 1976/113/	7.83 H	R=	19.1 R_E

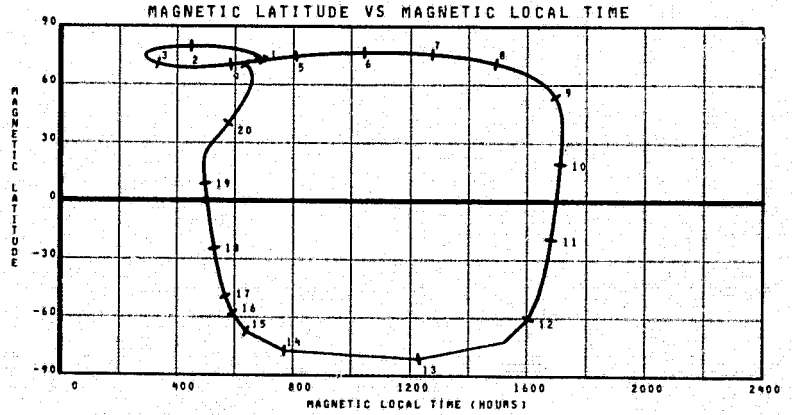
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/111/ 7.00H TO 1976/113/ 8.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/111/	7.50 H	R=	19.0 R_E	8 - 1976/112/	6.67 H	R=	12.3 R_E
2 - 1976/111/	11.00 H	R=	20.2 R_E	9 - 1976/112/	10.33 H	R=	7.0 R_E
3 - 1976/111/	16.50 H	R=	19.9 R_E	10 - 1976/112/	12.75 H	R=	3.9 R_E
4 - 1976/111/	22.00 H	R=	18.3 R_E	11 - 1976/112/	13.42 H	R=	2.1 R_E
5 - 1976/112/	1.00 H	R=	16.7 R_E	12 - 1976/112/	13.75 H	R=	1.7 R_E
6 - 1976/112/	3.00 H	R=	15.4 R_E	13 - 1976/112/	13.92 H	R=	1.7 R_E
7 - 1976/112/	4.67 H	R=	14.2 R_E	14 - 1976/112/	14.00 H	R=	1.0 R_E

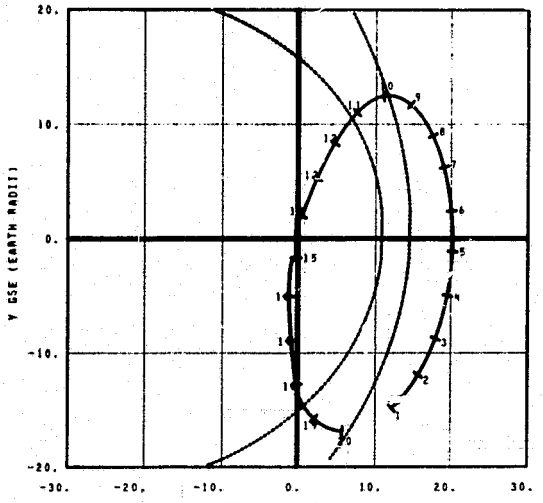
15 - 1976/112/	14.08 H	R=	1.0 R_E
16 - 1976/112/	14.17 H	R=	2.0 R_E
17 - 1976/112/	14.25 H	R=	2.1 R_E
18 - 1976/112/	14.58 H	R=	2.8 R_E
19 - 1976/112/	15.08 H	R=	5.3 R_E
20 - 1976/113/	0.17 H	R=	15.1 R_E
21 - 1976/113/	7.83 H	R=	19.1 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/111 / 7.00H TO1976/113 / 8.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/113/	0.33 H	LAT=	80.3	11 - 1976/114/	0.83 H	LAT=	60.9
2 - 1976/113/	10.33 H	LAT=	81.3	12 - 1976/114/	12.33 H	LAT=	49.1
3 - 1976/113/	11.83 H	LAT=	81.7	13 - 1976/114/	14.83 H	LAT=	29.9
4 - 1976/113/	13.33 H	LAT=	81.7	14 - 1976/114/	16.67 H	LAT=	-38.9
5 - 1976/113/	14.83 H	LAT=	81.5	15 - 1976/114/	17.00 H	LAT=	-79.2
6 - 1976/113/	16.33 H	LAT=	80.9	16 - 1976/114/	18.97 H	LAT=	30.4
7 - 1976/113/	18.33 H	LAT=	79.8	17 - 1976/114/	21.33 H	LAT=	52.4
8 - 1976/113/	20.33 H	LAT=	78.3	18 - 1976/115/	0.67 H	LAT=	69.8
9 - 1976/113/	23.83 H	LAT=	75.0	19 - 1976/115/	9.50 H	LAT=	72.6
10 - 1976/114/	9.33 H	LAT=	69.3	20 - 1976/115/	7.83 H	LAT=	77.8

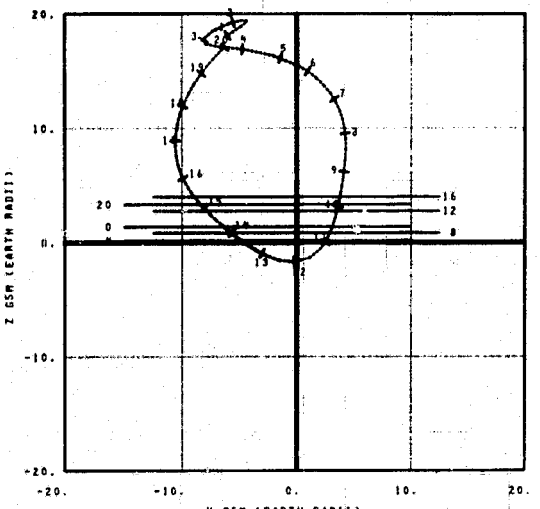
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/113/ 0.00H TO 1976/115/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/113/	0.33 H	R=	19.2 R_E	11 - 1976/114/	16.92 H	R=	2.4 R_E
2 - 1976/113/	15.33 H	R=	20.3 R_E	12 - 1976/114/	17.25 H	R=	1.4 R_E
3 - 1976/113/	20.33 H	R=	19.8 R_E	13 - 1976/114/	18.05 H	R=	3.3 R_E
4 - 1976/114/	1.83 H	R=	18.0 R_E	14 - 1976/114/	19.32 H	R=	5.0 R_E
5 - 1976/114/	4.33 H	R=	16.7 R_E	15 - 1976/114/	21.08 H	R=	8.4 R_E
6 - 1976/114/	6.17 H	R=	15.9 R_E	16 - 1976/114/	23.33 H	R=	11.4 R_E
7 - 1976/114/	8.67 H	R=	15.5 R_E	17 - 1976/115/	1.83 H	R=	13.8 R_E
8 - 1976/114/	11.17 H	R=	15.0 R_E	18 - 1976/115/	5.00 H	R=	15.9 R_E
9 - 1976/114/	12.50 H	R=	7.9 R_E	19 - 1976/115/	6.33 H	R=	17.0 R_E
10 - 1976/114/	15.17 H	R=	5.1 R_E	20 - 1976/115/	9.00 H	R=	18.3 R_E

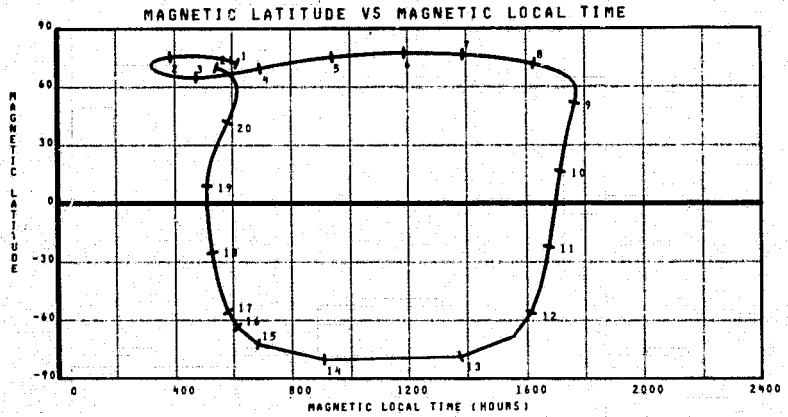
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/113/ 0.00H TO 1976/115/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

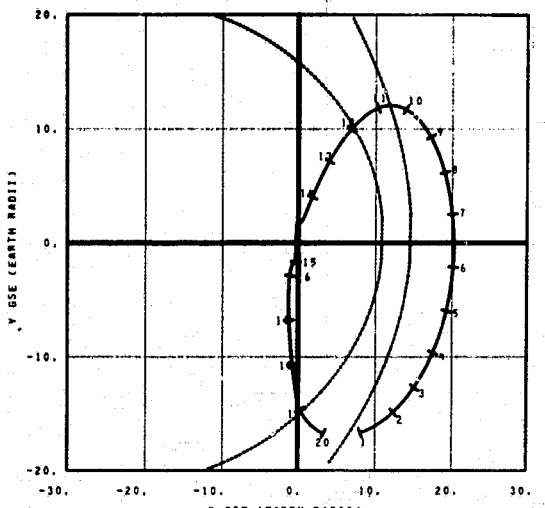
1 - 1976/113/	8.33 H	R=	19.2 R_E	8 - 1976/114/	9.33 H	R=	12.9 R_E	15 - 1976/114/	17.33 H	R=	1.9 R_E
2 - 1976/113/	11.83 H	R=	20.0 R_E	9 - 1976/114/	14.58 H	R=	6.2 R_E	16 - 1976/114/	17.92 H	R=	2.0 R_E
3 - 1976/113/	19.83 H	R=	19.9 R_E	10 - 1976/114/	16.25 H	R=	2.9 R_E	17 - 1976/114/	17.96 H	R=	2.2 R_E
4 - 1976/114/	0.33 H	R=	19.4 R_E	11 - 1976/114/	16.75 H	R=	1.9 R_E	18 - 1976/114/	17.98 H	R=	3.2 R_E
5 - 1976/114/	3.33 H	R=	17.2 R_E	12 - 1976/114/	17.00 H	R=	1.7 R_E	19 - 1976/114/	19.83 H	R=	6.7 R_E
6 - 1976/114/	5.33 H	R=	16.0 R_E	13 - 1976/114/	17.17 H	R=	1.7 R_E	20 - 1976/115/	2.17 H	R=	14.1 R_E
7 - 1976/114/	6.83 H	R=	15.0 R_E	14 - 1976/114/	17.25 H	R=	1.8 R_E	21 - 1976/115/	9.00 H	R=	18.3 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/113 / 0.00H TO1976/115 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/115/ 9.50H	LAT= 78.6	11 - 1976/116/ 9.00H	LAT= 67.1
2 - 1976/115/ 12.00H	LAT= 80.5	12 - 1976/116/ 13.33H	LAT= 57.5
3 - 1976/115/ 13.50H	LAT= 81.3	13 - 1976/116/ 16.50H	LAT= 43.9
4 - 1976/115/ 15.00H	LAT= 81.7	14 - 1976/116/ 18.75H	LAT= 17.2
5 - 1976/115/ 16.50H	LAT= 81.7	15 - 1976/116/ 20.33H	LAT= -79.1
6 - 1976/115/ 18.00H	LAT= 81.5	16 - 1976/116/ 21.17H	LAT= 2.3
7 - 1976/115/ 20.00H	LAT= 80.7	17 - 1976/116/ 23.17H	LAT= 42.6
8 - 1976/115/ 22.00H	LAT= 79.5	18 - 1976/117/ 1.92H	LAT= 58.6
9 - 1976/116/ 0.50H	LAT= 77.5	19 - 1976/117/ 4.00H	LAT= 69.5
10 - 1976/116/ 4.50H	LAT= 73.4	20 - 1976/117/ 9.67H	LAT= 79.3

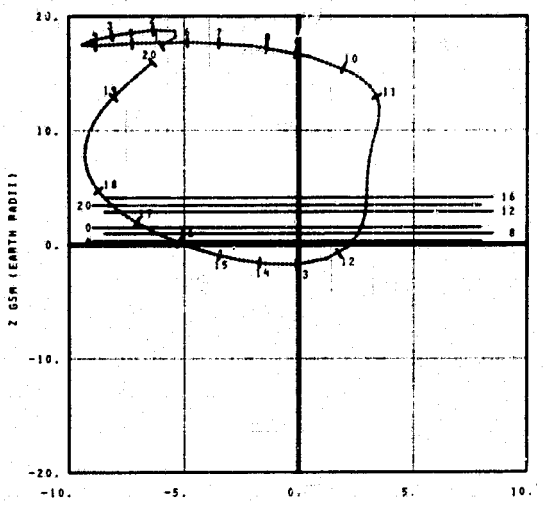
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/115/ 9.00H TO 1976/117/10.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/115/ 9.50H	R= 18.5RE	11 - 1976/116/ 11.33H	R= 14.0RE
2 - 1976/115/ 15.00H	R= 20.0RE	12 - 1976/116/ 20.00H	R= 1.9RE
3 - 1976/115/ 17.50H	R= 20.2RE	13 - 1976/116/ 20.50H	R= 1.8RE
4 - 1976/115/ 23.00H	R= 19.9RE	14 - 1976/116/ 20.92H	R= 2.6RE
5 - 1976/116/ 1.00H	R= 19.4RE	15 - 1976/116/ 21.50H	R= 3.0RE
6 - 1976/116/ 3.00H	R= 18.8RE	16 - 1976/116/ 22.30H	R= 5.4RE
7 - 1976/116/ 4.00H	R= 18.4RE	17 - 1976/116/ 23.50H	R= 7.4RE
8 - 1976/116/ 5.50H	R= 17.8RE	18 - 1976/117/ 1.33H	R= 10.0RE
9 - 1976/116/ 6.50H	R= 17.3RE	19 - 1976/117/ 4.03H	R= 15.2RE
10 - 1976/116/ 8.50H	R= 16.1RE	20 - 1976/117/ 10.00H	R= 17.2RE

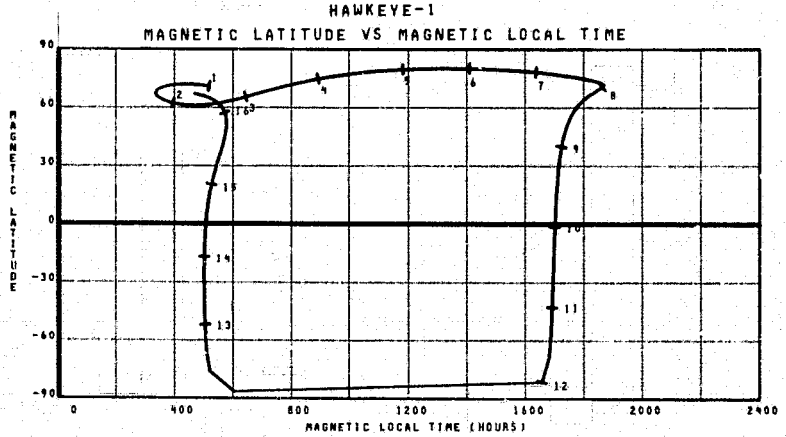
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/115/ 9.00H TO 1976/117/10.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

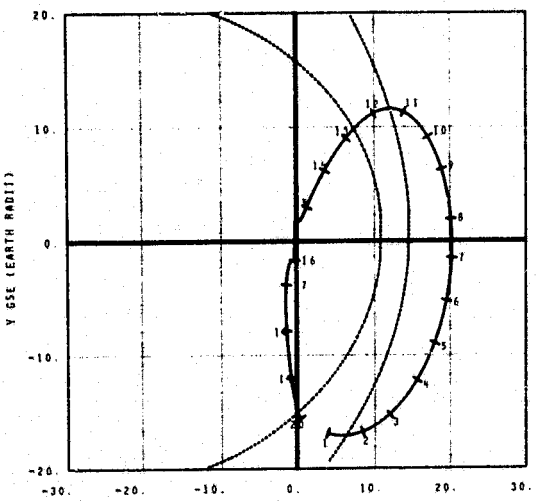
1 - 1976/115/ 9.50H	R= 18.5RE	8 - 1976/116/ 15.50H	R= 9.6RE	15 - 1976/117/ 0.33H	R= 8.6RE
2 - 1976/115/ 17.50H	R= 20.2RE	9 - 1976/116/ 19.08H	R= 3.7RE	16 - 1976/117/ 4.67H	R= 19.1RE
3 - 1976/115/ 24.00H	R= 19.7RE	10 - 1976/116/ 19.83H	R= 2.2RE		
4 - 1976/116/ 4.00H	R= 18.4RE	11 - 1976/116/ 20.17H	R= 1.7RE		
5 - 1976/116/ 6.50H	R= 17.3RE	12 - 1976/116/ 20.42H	R= 1.7RE		
6 - 1976/116/ 8.00H	R= 16.5RE	13 - 1976/116/ 20.83H	R= 2.9RE		
7 - 1976/116/ 9.83H	R= 15.2RE	14 - 1976/116/ 21.57H	R= 3.9RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/115 / 9.00H TO1976/117 /10.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/117/ 10.17H	LAT= 75.9	11 - 1976/118/ 0.33H	LAT= 72.7
2 - 1976/117/ 13.33H	LAT= 79.1	12 - 1976/118/ 13.33H	LAT= 65.1
3 - 1976/117/ 15.33H	LAT= 80.6	13 - 1976/118/ 17.50H	LAT= 59.9
4 - 1976/117/ 17.33H	LAT= 81.5	14 - 1976/118/ 20.92H	LAT= 38.6
5 - 1976/117/ 18.83H	LAT= 81.7	15 - 1976/118/ 22.50H	LAT= 0.7
6 - 1976/117/ 20.33H	LAT= 81.7	16 - 1976/118/ 23.50H	LAT= -80.9
7 - 1976/117/ 21.83H	LAT= 81.3	17 - 1976/119/ 0.83H	LAT= 18.3
8 - 1976/117/ 23.33H	LAT= 80.7	18 - 1976/119/ 3.00H	LAT= 40.1
9 - 1976/118/ 1.83H	LAT= 79.1	19 - 1976/119/ 6.33H	LAT= 62.6
10 - 1976/118/ 4.33H	LAT= 77.6	20 - 1976/119/ 10.50H	LAT= 71.8

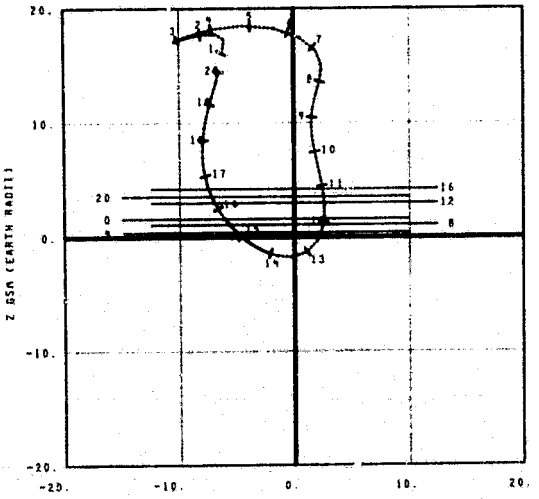
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/117/10.00H TO 1976/119/11.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/117/ 10.17H	R= 17.3RE	11 - 1976/118/ 21.33H	R= 5.4RE
2 - 1976/117/ 16.33H	R= 19.6RE	12 - 1976/118/ 22.50H	R= 3.1RE
3 - 1976/117/ 22.03H	R= 20.3RE	13 - 1976/118/ 23.92H	R= 1.7RE
4 - 1976/118/ 2.33H	R= 19.9RE	14 - 1976/119/ 0.25H	R= 2.8RE
5 - 1976/118/ 4.83H	R= 19.3RE	15 - 1976/119/ 1.22H	R= 4.0RE
6 - 1976/118/ 7.33H	R= 18.4RE	16 - 1976/119/ 2.50H	R= 7.2RE
7 - 1976/118/ 9.83H	R= 17.2RE	17 - 1976/119/ 4.17H	R= 9.5RE
8 - 1976/118/ 14.00H	R= 14.4RE	18 - 1976/119/ 6.00H	R= 11.6RE
9 - 1976/118/ 17.33H	R= 11.5RE	19 - 1976/119/ 8.17H	R= 13.7RE
10 - 1976/118/ 19.67H	R= 8.3RE	20 - 1976/119/ 11.00H	R= 15.9RE

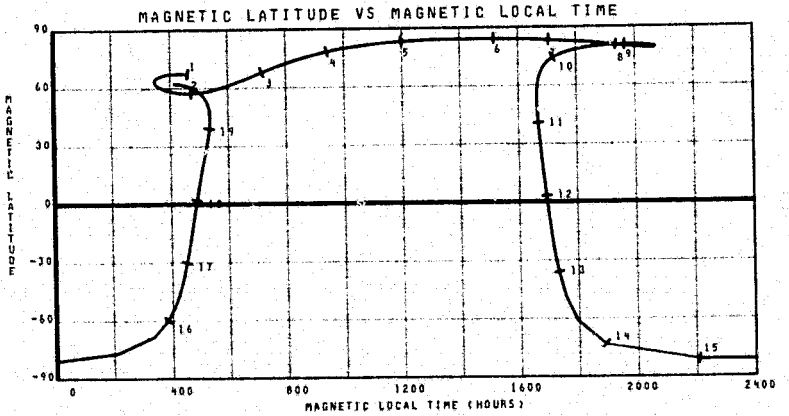
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/117/10.00H TO 1976/119/11.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

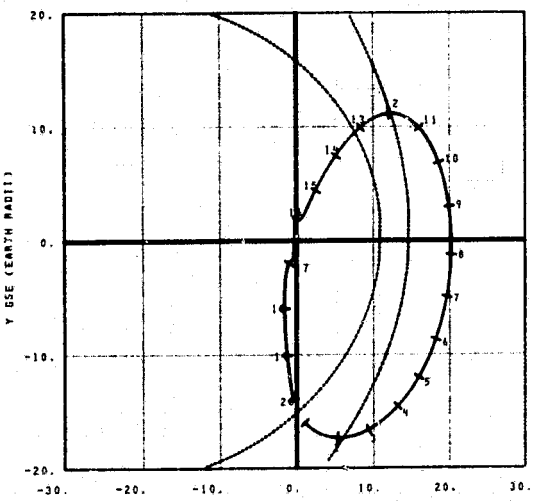
1 - 1976/117/ 10.17H	R= 17.3RE	8 - 1976/118/ 12.50H	R= 15.5RE	15 - 1976/118/ 23.67H	R= 1.8RE
2 - 1976/117/ 19.83H	R= 20.2RE	9 - 1976/118/ 18.17H	R= 10.3RE	16 - 1976/118/ 23.92H	R= 2.1RE
3 - 1976/118/ 2.33H	R= 19.9RE	10 - 1976/118/ 20.25H	R= 7.4RE	17 - 1976/119/ 0.33H	R= 3.0RE
4 - 1976/118/ 5.83H	R= 18.9RE	11 - 1976/118/ 22.33H	R= 3.6RE	18 - 1976/119/ 1.38H	R= 5.1RE
5 - 1976/118/ 7.83H	R= 18.2RE	12 - 1976/118/ 23.00H	R= 2.5RE	19 - 1976/119/ 4.83H	R= 10.3RE
6 - 1976/118/ 9.33H	R= 17.5RE	13 - 1976/118/ 23.33H	R= 1.8RE		
7 - 1976/118/ 10.33H	R= 16.9RE	14 - 1976/118/ 23.58H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/117/10.00H TO1976/119/11.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/119/ 11.17H	LAT=	72.8	11 - 1976/120/	9.50H	LAT=	75.1
2 - 1976/119/ 15.00H	LAT=	77.7	12 - 1976/120/	14.50H	LAT=	68.7
3 - 1976/119/ 17.50H	LAT=	79.9	13 - 1976/120/	18.83H	LAT=	60.2
4 - 1976/119/ 19.50H	LAT=	81.0	14 - 1976/120/	22.33H	LAT=	47.9
5 - 1976/119/ 21.50H	LAT=	81.4	15 - 1976/121/	0.83H	LAT=	29.1
6 - 1976/119/ 22.50H	LAT=	81.8	16 - 1976/121/	2.67H	LAT=	-81.3
7 - 1976/119/ 24.00H	LAT=	81.4	17 - 1976/121/	3.17H	LAT=	-26.1
8 - 1976/120/ 1.50H	LAT=	81.2	18 - 1976/121/	5.17H	LAT=	37.9
9 - 1976/120/ 3.50H	LAT=	80.2	19 - 1976/121/	7.92H	LAT=	56.8
10 - 1976/120/ 6.00H	LAT=	78.4	20 - 1976/121/	11.67H	LAT=	67.9

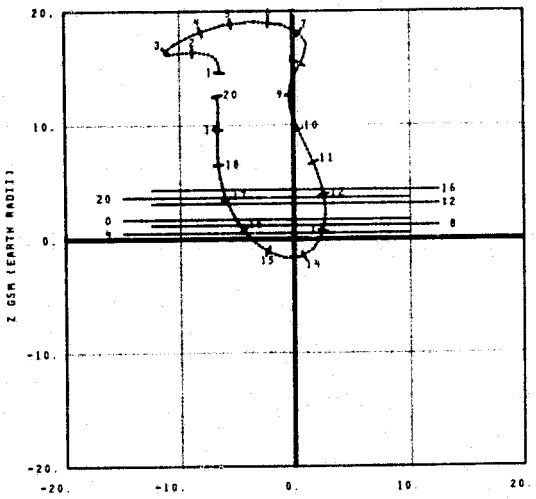
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/119/11.00H TO 1976/121/12.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/119/ 11.17H	R= 16.0R$_E$	11 - 1976/120/	23.33H	R=	7.4R$_E$
2 - 1976/119/ 16.50H	R= 18.7R$_E$	12 - 1976/121/	0.75H	R=	5.2R$_E$
3 - 1976/119/ 22.50H	R= 20.1R$_E$	13 - 1976/121/	1.92H	R=	2.9R$_E$
4 - 1976/120/ 2.50H	R= 20.2R$_E$	14 - 1976/121/	2.67H	R=	1.7R$_E$
5 - 1976/120/ 4.50H	R= 20.0R$_E$	15 - 1976/121/	3.50H	R=	2.9R$_E$
6 - 1976/120/ 7.00H	R= 19.5R$_E$	16 - 1976/121/	4.92H	R=	4.8R$_E$
7 - 1976/120/ 10.00H	R= 18.6R$_E$	17 - 1976/121/	5.75H	R=	7.1R$_E$
8 - 1976/120/ 15.00H	R= 16.0R$_E$	18 - 1976/121/	7.33H	R=	9.9R$_E$
9 - 1976/120/ 18.50H	R= 13.3R$_E$	19 - 1976/121/	9.33H	R=	11.8R$_E$
10 - 1976/120/ 21.33H	R= 10.3R$_E$	20 - 1976/121/	12.00H	R=	14.3R$_E$

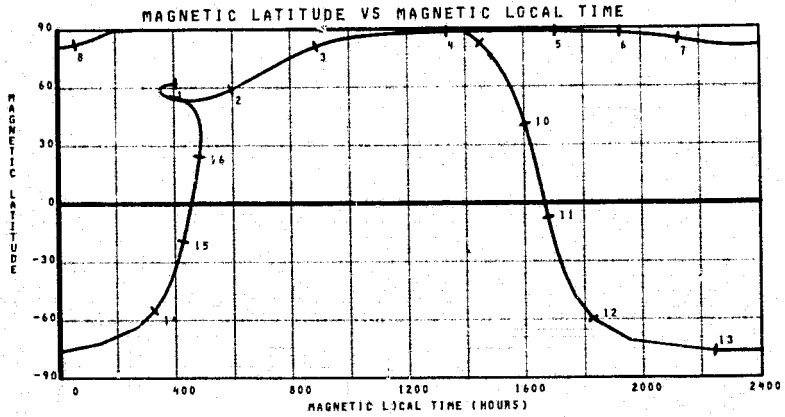
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/119/11.00H TO 1976/121/12.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

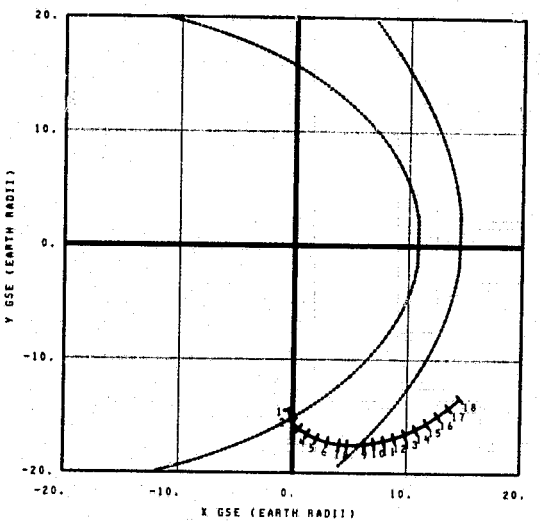
1 - 1976/119/ 11.17H	R= 16.0R$_E$	8 - 1976/120/ 17.83H	R= 13.9R$_E$	15 - 1976/121/ 3.50H	R= 3.1R$_E$
2 - 1976/119/ 24.00H	R= 20.3R$_E$	9 - 1976/120/ 22.00H	R= 9.5R$_E$	16 - 1976/121/ 4.92H	R= 4.6R$_E$
3 - 1976/120/ 7.00H	R= 19.5R$_E$	10 - 1976/121/ 1.33H	R= 4.1R$_E$		
4 - 1976/120/ 9.50H	R= 18.0R$_E$	11 - 1976/121/ 1.25H	R= 2.2R$_E$		
5 - 1976/120/ 10.00H	R= 18.6R$_E$	12 - 1976/121/ 2.67H	R= 1.7R$_E$		
6 - 1976/120/ 10.50H	R= 18.9R$_E$	13 - 1976/121/ 2.83H	R= 1.7R$_E$		
7 - 1976/120/ 12.00H	R= 17.7R$_E$	14 - 1976/121/ 3.00H	R= 2.1R$_E$		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/119/11.00H TO1976/121/12.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/121/ 12.17H	LAT= 69.9	11 - 1976/121/ 20.33H	LAT= 79.5
2 - 1976/121/ 13.33H	LAT= 71.1	12 - 1976/121/ 20.83H	LAT= 79.9
3 - 1976/121/ 14.50H	LAT= 73.0	13 - 1976/121/ 21.33H	LAT= 80.3
4 - 1976/121/ 15.33H	LAT= 74.2	14 - 1976/121/ 21.83H	LAT= 80.6
5 - 1976/121/ 16.17H	LAT= 75.3	15 - 1976/121/ 22.33H	LAT= 80.8
6 - 1976/121/ 17.00H	LAT= 76.3	16 - 1976/121/ 22.83H	LAT= 81.1
7 - 1976/121/ 17.83H	LAT= 77.2	17 - 1976/121/ 23.33H	LAT= 81.3
8 - 1976/121/ 18.33H	LAT= 77.8	18 - 1976/121/ 23.83H	LAT= 81.5
9 - 1976/121/ 19.33H	LAT= 78.7		
10 - 1976/121/ 19.83H	LAT= 79.1		

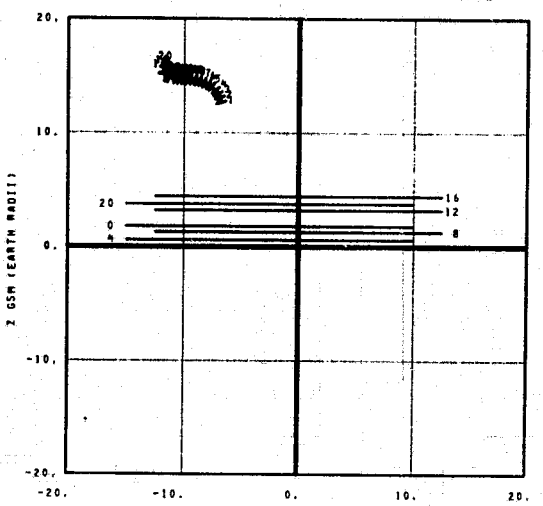
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/121/12.00H TO 1976/122/ 0.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/121/ 12.17H	R= 19.4RE	11 - 1976/121/ 17.33H	R= 17.7RE
2 - 1976/121/ 12.67H	R= 19.0RE	12 - 1976/121/ 17.83H	R= 17.9RE
3 - 1976/121/ 13.17H	R= 18.2RE	13 - 1976/121/ 18.33H	R= 18.2RE
4 - 1976/121/ 13.67H	R= 15.5RE	14 - 1976/121/ 18.83H	R= 18.4RE
5 - 1976/121/ 14.33H	R= 15.0RE	15 - 1976/121/ 19.83H	R= 18.8RE
6 - 1976/121/ 14.83H	R= 16.3RE	16 - 1976/121/ 20.33H	R= 18.9RE
7 - 1976/121/ 15.33H	R= 16.6RE	17 - 1976/121/ 21.83H	R= 19.4RE
8 - 1976/121/ 15.83H	R= 16.9RE	18 - 1976/121/ 22.83H	R= 19.6RE
9 - 1976/121/ 16.33H	R= 17.2RE	19 - 1976/121/ 23.33H	R= 19.8RE
10 - 1976/121/ 16.83H	R= 17.4RE	20 - 1976/121/ 23.83H	R= 19.9RE

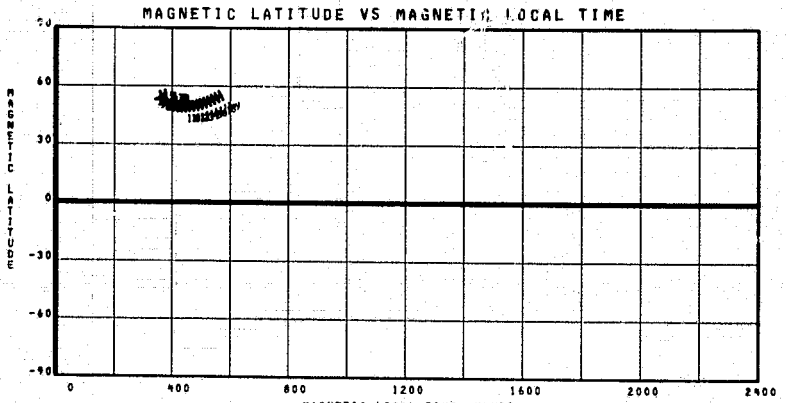
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/121/12.00H TO 1976/122/ 0.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

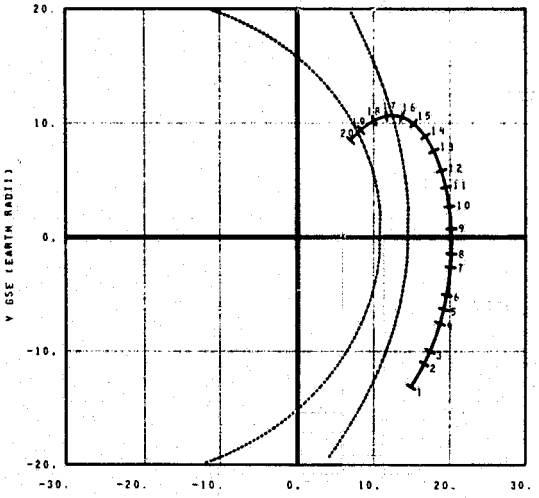
1 - 1976/121/ 12.17H	R= 19.4RE	8 - 1976/121/ 18.33H	R= 18.2RE	15 - 1976/121/ 21.83H	R= 19.4RE
2 - 1976/121/ 13.00H	R= 19.0RE	9 - 1976/121/ 18.83H	R= 18.4RE	16 - 1976/121/ 22.33H	R= 19.5RE
3 - 1976/121/ 14.33H	R= 18.9RE	10 - 1976/121/ 19.33H	R= 18.6RE	17 - 1976/121/ 22.83H	R= 19.6RE
4 - 1976/121/ 15.50H	R= 18.7RE	11 - 1976/121/ 19.83H	R= 18.8RE	18 - 1976/121/ 23.33H	R= 19.8RE
5 - 1976/121/ 16.17H	R= 17.1RE	12 - 1976/121/ 20.33H	R= 18.9RE	19 - 1976/121/ 23.83H	R= 19.9RE
6 - 1976/121/ 16.83H	R= 11.4RE	13 - 1976/121/ 20.83H	R= 19.1RE		
7 - 1976/121/ 17.83H	R= 17.9RE	14 - 1976/121/ 21.33H	R= 19.3RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/121 /12.00H TO1976/122 / 0.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/122/	0.00H	LAT=	81.5	11 - 1976/122/	8.00H	LAT=	79.4
2 - 1976/122/	1.00H	LAT=	81.7	12 - 1976/122/	9.00H	LAT=	78.6
3 - 1976/122/	1.50H	LAT=	81.8	13 - 1976/122/	10.50H	LAT=	77.3
4 - 1976/122/	2.50H	LAT=	81.8	14 - 1976/122/	12.00H	LAT=	75.9
5 - 1976/122/	3.00H	LAT=	81.7	15 - 1976/122/	14.00H	LAT=	73.7
6 - 1976/122/	3.50H	LAT=	81.6	16 - 1976/122/	16.00H	LAT=	71.2
7 - 1976/122/	4.50H	LAT=	81.3	17 - 1976/122/	18.50H	LAT=	67.5
8 - 1976/122/	5.00H	LAT=	81.1	18 - 1976/122/	20.50H	LAT=	63.8
9 - 1976/122/	6.00H	LAT=	80.6	19 - 1976/122/	22.50H	LAT=	59.0
10 - 1976/122/	7.00H	LAT=	80.0	20 - 1976/122/	24.00H	LAT=	54.3

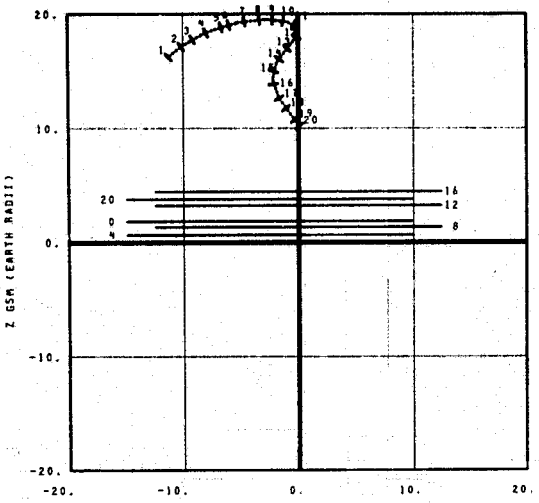
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/122/ 0.00H TO 1976/123/ 0.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/122/	0.00H	R=	19.9R_E	11 - 1976/122/	10.50H	R=	19.5R_E
2 - 1976/122/	1.50H	R=	20.1R_E	12 - 1976/122/	13.50H	R=	18.5R_E
3 - 1976/122/	2.50H	R=	20.2R_E	13 - 1976/122/	15.50H	R=	17.6R_E
4 - 1976/122/	3.50H	R=	20.3R_E	14 - 1976/122/	17.00H	R=	16.8R_E
5 - 1976/122/	4.50H	R=	20.3R_E	15 - 1976/122/	18.50H	R=	15.8R_E
6 - 1976/122/	5.00H	R=	20.3R_E	16 - 1976/122/	20.00H	R=	14.8R_E
7 - 1976/122/	6.00H	R=	20.2R_E	17 - 1976/122/	21.50H	R=	13.5R_E
8 - 1976/122/	7.00H	R=	20.1R_E	18 - 1976/122/	22.50H	R=	12.6R_E
9 - 1976/122/	8.00H	R=	20.0R_E	19 - 1976/122/	23.50H	R=	11.5R_E
10 - 1976/122/	9.00H	R=	19.8R_E	20 - 1976/122/	24.00H	R=	11.0R_E

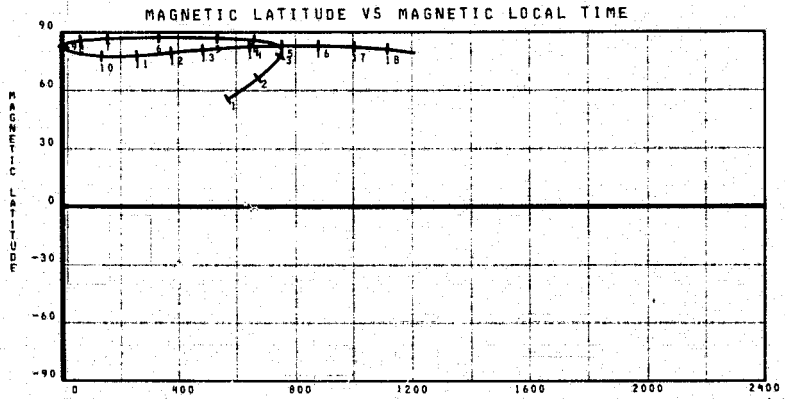
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/122/ 0.00H TO 1976/123/ 0.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

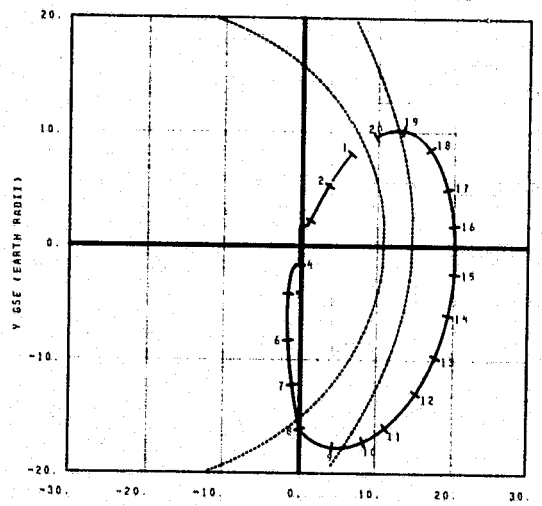
1 - 1976/122/	0.00H	R=	19.9R_E	8 - 1976/122/	11.00H	R=	19.3R_E	15 - 1976/122/	22.00H	R=	13.1R_E
2 - 1976/122/	3.50H	R=	20.3R_E	9 - 1976/122/	12.50H	R=	18.9R_E	16 - 1976/122/	22.50H	R=	12.6R_E
3 - 1976/122/	6.50H	R=	20.2R_E	10 - 1976/122/	14.00H	R=	17.3R_E	17 - 1976/122/	23.00H	R=	12.1R_E
4 - 1976/122/	9.00H	R=	19.8R_E	11 - 1976/122/	16.00H	R=	16.2R_E	18 - 1976/122/	23.50H	R=	11.5R_E
5 - 1976/122/	9.50H	R=	19.7R_E	12 - 1976/122/	19.50H	R=	15.1R_E				
6 - 1976/122/	10.00H	R=	19.6R_E	13 - 1976/122/	20.50H	R=	14.4R_E				
7 - 1976/122/	10.50H	R=	19.5R_E	14 - 1976/122/	21.50H	R=	13.5R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/122 / 0.00H TO1976/123 / 0.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/123/	0.50 H	LAT=	52.4	11 - 1976/124/	1.67 H	LAT=	80.9
2 - 1976/123/	3.33 H	LAT=	34.0	12 - 1976/124/	3.67 H	LAT=	81.6
3 - 1976/123/	5.32 H	LAT=	-20.5	13 - 1976/124/	5.17 H	LAT=	81.8
4 - 1976/123/	5.93 H	LAT=	-80.2	14 - 1976/124/	6.67 H	LAT=	81.6
5 - 1976/123/	7.50 H	LAT=	23.9	15 - 1976/124/	8.17 H	LAT=	81.2
6 - 1976/123/	9.83 H	LAT=	50.1	16 - 1976/124/	10.17 H	LAT=	80.1
7 - 1976/123/	13.00 H	LAT=	63.2	17 - 1976/124/	12.17 H	LAT=	78.7
8 - 1976/123/	17.67 H	LAT=	72.8	18 - 1976/124/	15.67 H	LAT=	75.5
9 - 1976/123/	21.67 H	LAT=	77.8	19 - 1976/124/	20.17 H	LAT=	70.0
10 - 1976/124/	0.17 H	LAT=	80.0	20 - 1976/125/	0.50 H	LAT=	62.1

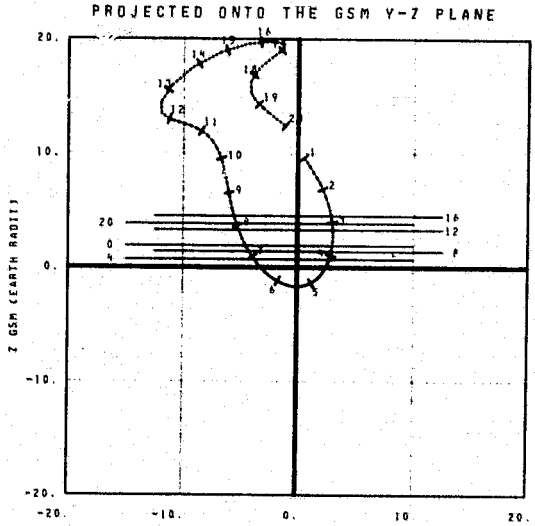
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/123/ 0.00H TO 1976/125/ 1.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/123/	0.50 H	R=	10.4 R_E	11 - 1976/123/	15.67 H	R=	14.6 R_E
2 - 1976/123/	2.33 H	R=	8.0 R_E	12 - 1976/123/	19.50 H	R=	17.2 R_E
3 - 1976/123/	3.75 H	R=	5.6 R_E	13 - 1976/124/	0.67 H	R=	19.3 R_E
4 - 1976/123/	4.87 H	R=	3.4 R_E	14 - 1976/124/	3.67 H	R=	20.0 R_E
5 - 1976/123/	5.73 H	R=	1.8 R_E	15 - 1976/124/	5.67 H	R=	20.2 R_E
6 - 1976/123/	6.47 H	R=	2.4 R_E	16 - 1976/124/	8.17 H	R=	20.3 R_E
7 - 1976/123/	7.92 H	R=	4.4 R_E	17 - 1976/124/	13.67 H	R=	19.5 R_E
8 - 1976/123/	8.67 H	R=	6.6 R_E	18 - 1976/124/	18.17 H	R=	17.9 R_E
9 - 1976/123/	10.25 H	R=	9.0 R_E	19 - 1976/124/	22.33 H	R=	15.4 R_E
10 - 1976/123/	12.50 H	R=	11.7 R_E	20 - 1976/125/	1.00 H	R=	13.3 R_E

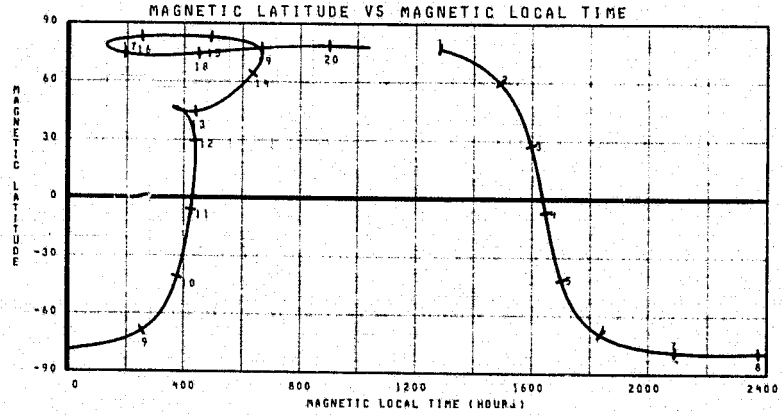
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/123/ 0.00H TO 1976/125/ 1.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

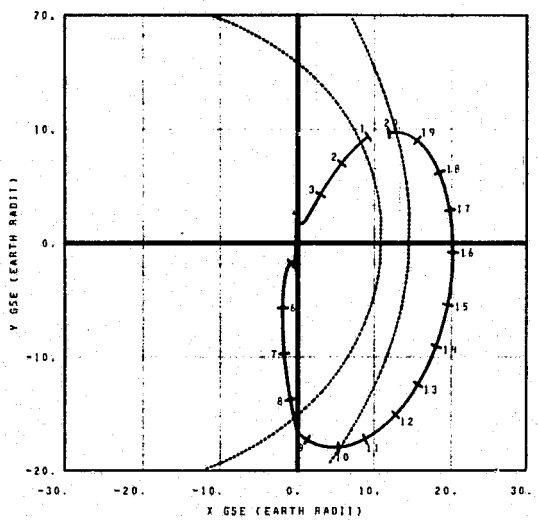
1 - 1976/123/	0.50 H	R=	10.4 R_E	8 - 1976/123/	6.02 H	R=	1.7 R_E	15 - 1976/124/	9.17 H	R=	20.2 R_E
2 - 1976/123/	2.83 H	R=	7.2 R_E	9 - 1976/123/	6.12 H	R=	1.8 R_E	16 - 1976/124/	10.67 H	R=	20.1 R_E
3 - 1976/123/	4.17 H	R=	3.8 R_E	10 - 1976/123/	6.37 H	R=	2.2 R_E	17 - 1976/124/	13.67 H	R=	18.9 R_E
4 - 1976/123/	5.35 H	R=	2.4 R_E	11 - 1976/123/	6.92 H	R=	3.3 R_E	18 - 1976/124/	20.17 H	R=	16.8 R_E
5 - 1976/123/	5.68 H	R=	1.8 R_E	12 - 1976/123/	8.58 H	R=	6.5 R_E	19 - 1976/124/	22.50 H	R=	15.3 R_E
6 - 1976/123/	5.88 H	R=	1.7 R_E	13 - 1976/123/	10.33 H	R=	17.1 R_E	20 - 1976/125/	0.17 H	R=	14.0 R_E
7 - 1976/123/	5.97 H	R=	1.7 R_E	14 - 1976/124/	3.67 H	R=	20.0 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/123 / 0.00H TO1976/125 / 1.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/125/	1.17H	LAT=	60.5	11 - 1976/126/	9.00H	LAT=	80.4
2 - 1976/125/	4.83H	LAT=	47.2	12 - 1976/126/	6.00H	LAT=	81.4
3 - 1976/125/	7.25H	LAT=	24.5	13 - 1976/126/	7.50H	LAT=	81.7
4 - 1976/125/	9.08H	LAT=	-80.5	14 - 1976/126/	9.00H	LAT=	81.8
5 - 1976/125/	9.47H	LAT=	-39.4	15 - 1976/126/	10.50H	LAT=	81.5
6 - 1976/125/	11.50H	LAT=	36.7	16 - 1976/126/	12.50H	LAT=	80.7
7 - 1976/125/	14.08H	LAT=	55.5	17 - 1976/126/	14.50H	LAT=	79.4
8 - 1976/125/	17.83H	LAT=	67.2	18 - 1976/126/	17.00H	LAT=	77.4
9 - 1976/125/	23.00H	LAT=	75.7	19 - 1976/126/	21.00H	LAT=	73.2
10 - 1976/126/	2.00H	LAT=	78.0	20 - 1976/127/	1.67H	LAT=	66.4

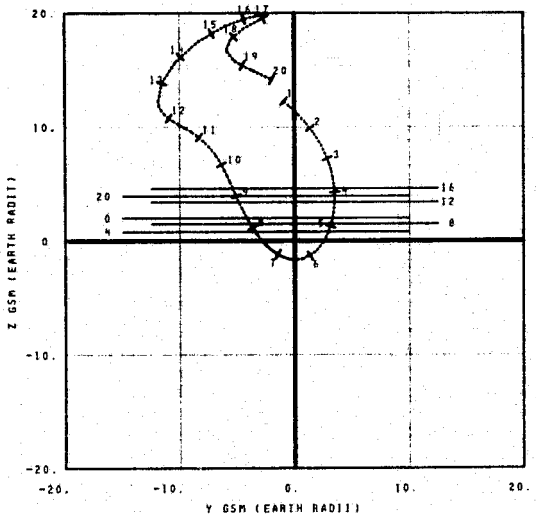
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/125/ 1.00H TO 1976/127/ 2.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/125/	1.17H	R=	13.1RE	11 - 1976/125/	14.33H	R=	12.9RE
2 - 1976/125/	3.33H	R=	10.9RE	12 - 1976/125/	19.83H	R=	15.3RE
3 - 1976/125/	5.08H	R=	8.6RE	13 - 1976/126/	0.50H	R=	18.0RE
4 - 1976/125/	6.58H	R=	6.3RE	14 - 1976/126/	3.00H	R=	19.0RE
5 - 1976/125/	7.83H	R=	3.9RE	15 - 1976/126/	5.50H	R=	19.7RE
6 - 1976/125/	8.83H	R=	1.9RE	16 - 1976/126/	8.00H	R=	20.1RE
7 - 1976/125/	9.58H	R=	2.2RE	17 - 1976/126/	14.00H	R=	20.1RE
8 - 1976/125/	10.58H	R=	4.3RE	18 - 1976/126/	18.00H	R=	19.2RE
9 - 1976/125/	11.92H	R=	6.7RE	19 - 1976/126/	23.50H	R=	16.7RE
10 - 1976/125/	13.75H	R=	9.4RE	20 - 1976/127/	2.00H	R=	15.1RE

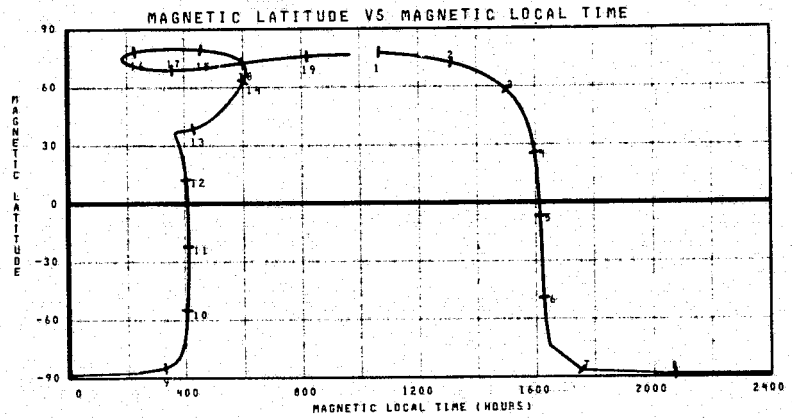
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/125/ 1.00H TO 1976/127/ 2.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

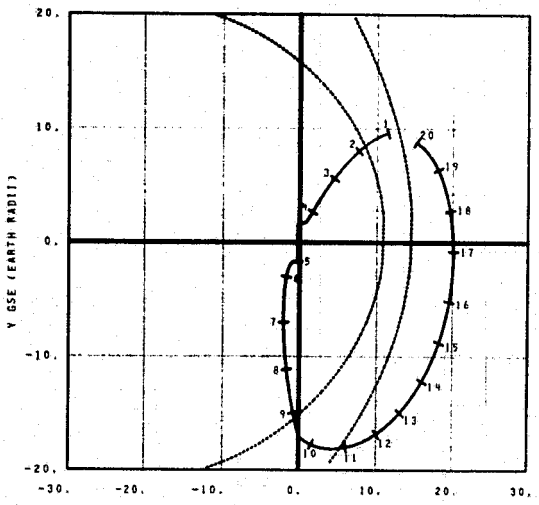
1 - 1976/125/	1.17H	R=	13.1RE	8 - 1976/125/	9.18H	R=	1.7RE
2 - 1976/125/	3.00H	R=	11.2RE	9 - 1976/125/	9.22H	R=	1.7RE
3 - 1976/125/	5.42H	R=	8.2RE	10 - 1976/125/	9.43H	R=	1.9RE
4 - 1976/125/	7.75H	R=	4.1RE	11 - 1976/125/	9.80H	R=	2.6RE
5 - 1976/125/	8.90H	R=	2.3RE	12 - 1976/125/	10.75H	R=	4.6RE
6 - 1976/125/	8.92H	R=	1.8RE	13 - 1976/125/	13.17H	R=	14.8RE
7 - 1976/125/	9.17H	R=	1.7RE	14 - 1976/126/	9.00H	R=	19.3RE
				15 - 1976/126/	9.00H	R=	20.2RE
				16 - 1976/126/	11.50H	R=	20.3RE
				17 - 1976/126/	18.50H	R=	19.0RE
				18 - 1976/126/	22.50H	R=	17.3RE
				19 - 1976/127/	0.83H	R=	15.9RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/125 / 1.00H TO1976/127 / 2.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/127/	2.17H	LAT=	65.5	11 - 1976/128/	6.17H	LAT=	79.6
2 - 1976/127/	4.33H	LAT=	54.8	12 - 1976/128/	8.17H	LAT=	80.9
3 - 1976/127/	9.25H	LAT=	39.2	13 - 1976/128/	9.67H	LAT=	81.5
4 - 1976/127/	11.42H	LAT=	-1.4	14 - 1976/128/	11.17H	LAT=	81.8
5 - 1976/127/	12.37H	LAT=	-80.0	15 - 1976/128/	12.67H	LAT=	81.7
6 - 1976/127/	13.42H	LAT=	9.3	16 - 1976/128/	14.17H	LAT=	81.4
7 - 1976/127/	15.50H	LAT=	44.6	17 - 1976/128/	16.17H	LAT=	80.5
8 - 1976/127/	18.50H	LAT=	60.2	18 - 1976/128/	18.17H	LAT=	79.1
9 - 1976/127/	22.50H	LAT=	70.0	19 - 1976/128/	21.17H	LAT=	76.6
10 - 1976/128/	3.17H	LAT=	76.8	20 - 1976/129/	1.17H	LAT=	72.1

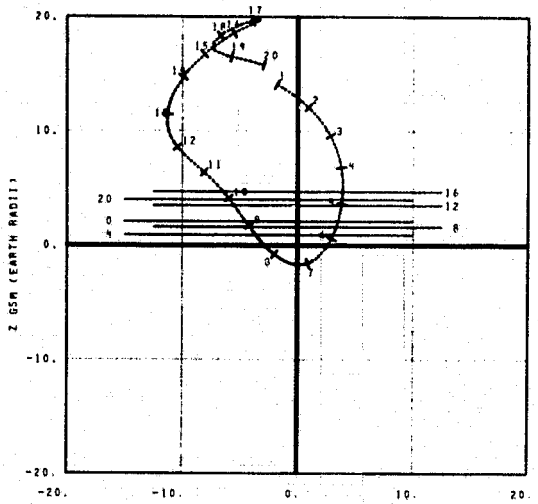
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/127/ 2.00H TO 1976/129/ 3.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/127/	2.17H	R=	15.0RE	11 - 1976/127/	17.83H	R=	10.5RE
2 - 1976/127/	4.50H	R=	13.0RE	12 - 1976/127/	20.83H	R=	13.6RE
3 - 1976/127/	6.50H	R=	10.9RE	13 - 1976/128/	0.17H	R=	16.1RE
4 - 1976/127/	8.25H	R=	8.7RE	14 - 1976/128/	3.17H	R=	17.8RE
5 - 1976/127/	9.92H	R=	6.1RE	15 - 1976/128/	5.17H	R=	18.6RE
6 - 1976/127/	11.25H	R=	3.5RE	16 - 1976/128/	7.67H	R=	19.5RE
7 - 1976/127/	12.18H	R=	1.8RE	17 - 1976/128/	14.17H	R=	20.3RE
8 - 1976/127/	13.00H	R=	2.6RE	18 - 1976/128/	18.17H	R=	19.9RE
9 - 1976/127/	14.17H	R=	5.0RE	19 - 1976/129/	0.17H	R=	18.1RE
10 - 1976/127/	15.67H	R=	7.6RE	20 - 1976/129/	2.67H	R=	16.9RE

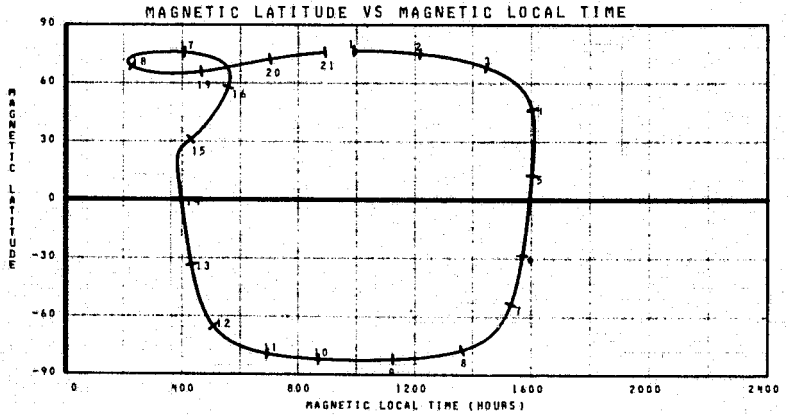
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/127/ 2.00H TO 1976/129/ 3.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

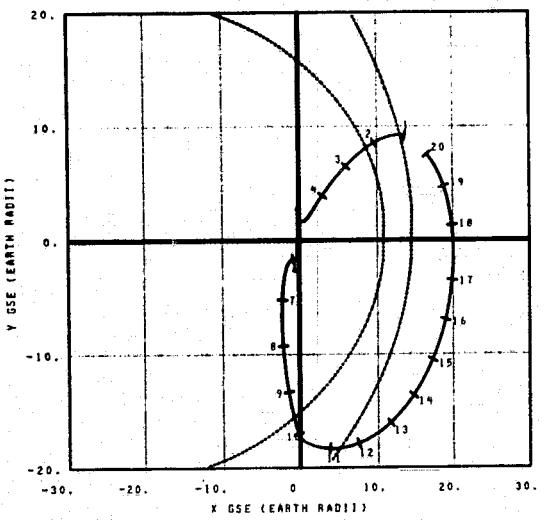
1 - 1976/127/	2.17H	R=	15.0RE	8 - 1976/127/	12.37H	R=	1.7RE	15 - 1976/127/	19.50H	R=	18.3RE
2 - 1976/127/	3.83H	R=	13.6RE	9 - 1976/127/	12.42H	R=	1.7RE	16 - 1976/128/	3.67H	R=	18.0RE
3 - 1976/127/	6.17H	R=	11.3RE	10 - 1976/127/	12.45H	R=	1.7RE	17 - 1976/128/	9.17H	R=	19.0RE
4 - 1976/127/	9.75H	R=	6.9RE	11 - 1976/127/	12.48H	R=	1.7RE	18 - 1976/128/	14.67H	R=	20.3RE
5 - 1976/127/	11.42H	R=	3.2RE	12 - 1976/127/	12.68H	R=	1.9RE	19 - 1976/128/	20.67H	R=	19.3RE
6 - 1976/127/	12.00H	R=	2.0RE	13 - 1976/127/	12.93H	R=	2.9RE	20 - 1976/129/	0.67H	R=	17.8RE
7 - 1976/127/	12.20H	R=	1.7RE	14 - 1976/127/	13.75H	R=	4.2RE	21 - 1976/129/	2.67H	R=	16.0RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/127 / 2.00H TO1976/129 / 3.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/129/	3.17H	LAT=	49.3	11 -	1976/130/	8.50H	LAT=	78.0
2 -	1976/129/	7.83H	LAT=	60.1	12 -	1976/130/	10.50H	LAT=	80.3
3 -	1976/129/	11.33H	LAT=	67.1	13 -	1976/130/	12.50H	LAT=	81.3
4 -	1976/129/	13.75H	LAT=	23.6	14 -	1976/130/	14.00H	LAT=	81.7
5 -	1976/129/	15.50H	LAT=	-78.0	15 -	1976/130/	15.50H	LAT=	81.8
6 -	1976/129/	15.80H	LAT=	-51.9	16 -	1976/130/	17.00H	LAT=	81.5
7 -	1976/129/	17.75H	LAT=	34.3	17 -	1976/130/	18.50H	LAT=	80.9
8 -	1976/129/	20.25H	LAT=	54.2	18 -	1976/130/	21.00H	LAT=	79.4
9 -	1976/129/	23.83H	LAT=	64.1	19 -	1976/130/	23.50H	LAT=	77.4
10 -	1976/130/	4.83H	LAT=	74.8	20 -	1976/131/	3.00H	LAT=	73.8

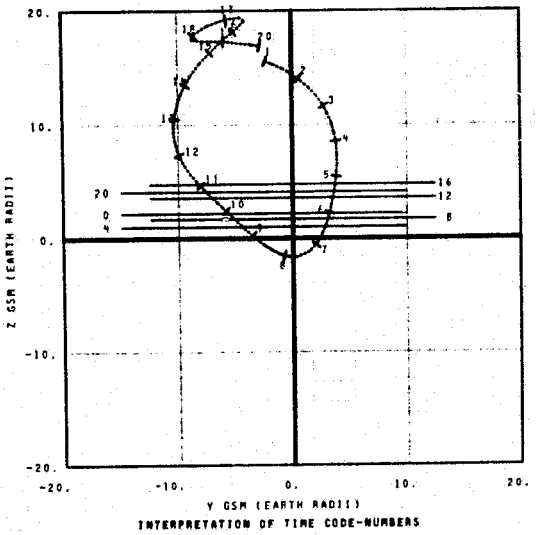
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/129/ 3.00H TO 1976/131/ 4.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/129/	3.17H	R=	16.5R_E	11 -	1976/129/	20.25H	R=	9.5R_E
2 -	1976/129/	5.50H	R=	19.9R_E	12 -	1976/129/	22.83H	R=	12.4R_E
3 -	1976/129/	7.83H	R=	12.9R_E	13 -	1976/130/	1.50H	R=	14.8R_E
4 -	1976/129/	10.17H	R=	10.4R_E	14 -	1976/130/	3.83H	R=	16.4R_E
5 -	1976/129/	12.17H	R=	7.7R_E	15 -	1976/130/	6.50H	R=	17.8R_E
6 -	1976/129/	13.83H	R=	4.8R_E	16 -	1976/130/	9.00H	R=	18.9R_E
7 -	1976/129/	15.00H	R=	2.4R_E	17 -	1976/130/	15.50H	R=	20.2R_E
8 -	1976/129/	15.88H	R=	2.0R_E	18 -	1976/130/	20.00H	R=	20.1R_E
9 -	1976/129/	16.92H	R=	4.1R_E	19 -	1976/131/	1.50H	R=	18.8R_E
10 -	1976/129/	18.33H	R=	6.7R_E	20 -	1976/131/	4.00H	R=	17.8R_E

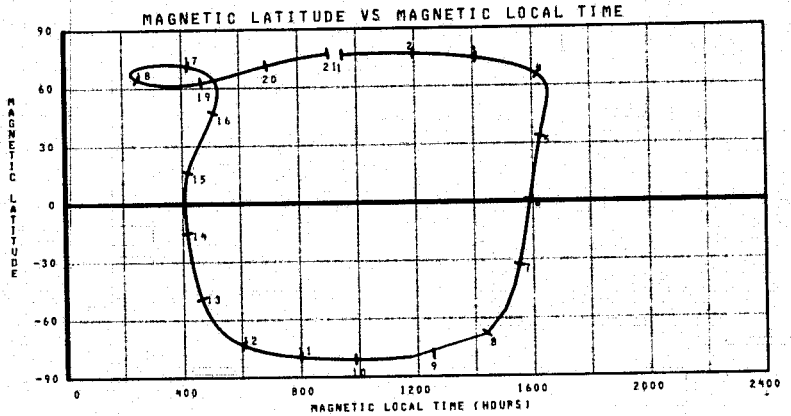
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/129/ 3.00H TO 1976/131/ 4.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



MAGNETIC LOCAL TIME (HOURS)

INTERPRETATION OF TIME CODE-NUMBERS

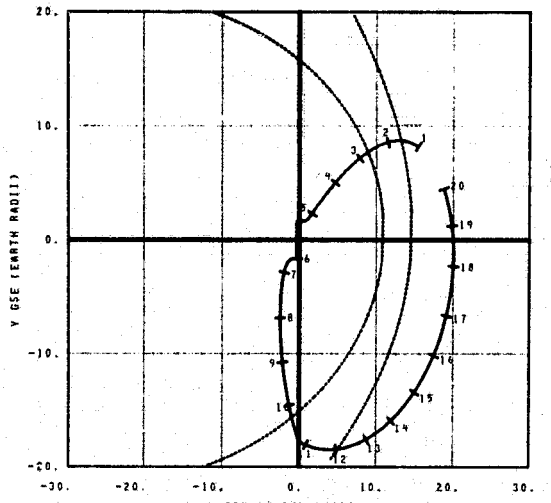
1 -	1976/129/	3.17H	R=	16.5R_E	8 -	1976/129/	15.50H	R=	1.7R_E
2 -	1976/129/	5.00H	R=	19.2R_E	9 -	1976/129/	15.67H	R=	1.7R_E
3 -	1976/129/	6.83H	R=	13.8R_E	10 -	1976/129/	15.72H	R=	1.8R_E
4 -	1976/129/	10.17H	R=	10.4R_E	11 -	1976/129/	15.75H	R=	1.8R_E
5 -	1976/129/	14.25H	R=	4.8R_E	12 -	1976/129/	15.82H	R=	1.9R_E
6 -	1976/129/	15.00H	R=	2.4R_E	13 -	1976/129/	14.87H	R=	2.3R_E
7 -	1976/129/	15.33H	R=	1.8R_E	14 -	1976/129/	16.75H	R=	3.7R_E
					15 -	1976/129/	19.33H	R=	8.2R_E
					16 -	1976/130/	2.17H	R=	15.3R_E
					17 -	1976/130/	8.50H	R=	18.7R_E
					18 -	1976/130/	15.00H	R=	20.8R_E
					19 -	1976/130/	21.00H	R=	20.0R_E
					20 -	1976/131/	1.50H	R=	18.8R_E
					21 -	1976/131/	4.00H	R=	17.8R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/129 / 3.00H TO1976/131 / 4.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/131/ 4.50 H	LAT= 72.0	11 - 1976/132/ 10.17 H	LAT= 77.3
2 - 1976/131/ 9.33 H	LAT= 69.2	12 - 1976/132/ 12.67 H	LAT= 79.6
3 - 1976/131/ 13.17 H	LAT= 53.5	13 - 1976/132/ 14.67 H	LAT= 80.9
4 - 1976/131/ 15.92 H	LAT= 37.3	14 - 1976/132/ 16.17 H	LAT= 81.5
5 - 1976/131/ 18.00 H	LAT= -8.4	15 - 1976/132/ 17.67 H	LAT= 81.8
6 - 1976/131/ 18.82 H	LAT= -78.5	16 - 1976/132/ 19.17 H	LAT= 81.7
7 - 1976/131/ 19.85 H	LAT= 9.3	17 - 1976/132/ 20.67 H	LAT= 81.4
8 - 1976/131/ 21.92 H	LAT= 49.4	18 - 1976/132/ 22.67 H	LAT= 80.5
9 - 1976/132/ 0.67 H	LAT= 59.2	19 - 1976/133/ 0.67 H	LAT= 79.2
10 - 1976/132/ 4.50 H	LAT= 69.2	20 - 1976/133/ 3.17 H	LAT= 77.1

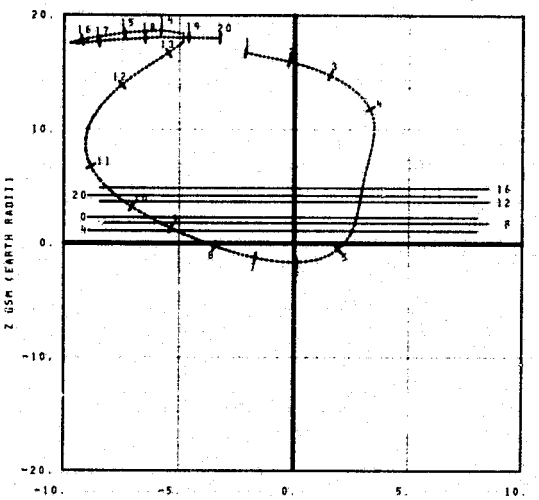
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/131/ 4.00H TO 1976/133/ 5.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/131/ 4.50 H	R= 17.5 R_E	11 - 1976/132/ 1.00 H	R= 11.3 R_E
2 - 1976/131/ 6.00 H	R= 16.7 R_E	12 - 1976/132/ 4.17 H	R= 15.8 R_E
3 - 1976/131/ 7.67 H	R= 15.6 R_E	13 - 1976/132/ 9.17 H	R= 17.6 R_E
4 - 1976/131/ 10.67 H	R= 13.2 R_E	14 - 1976/132/ 14.67 H	R= 19.6 R_E
5 - 1976/131/ 18.33 H	R= 2.2 R_E	15 - 1976/132/ 16.67 H	R= 20.0 R_E
6 - 1976/131/ 18.95 H	R= 1.0 R_E	16 - 1976/132/ 19.17 H	R= 20.2 R_E
7 - 1976/131/ 19.47 H	R= 2.6 R_E	17 - 1976/133/ 0.17 H	R= 20.0 R_E
8 - 1976/131/ 20.15 H	R= 4.1 R_E	18 - 1976/133/ 2.17 H	R= 19.6 R_E
9 - 1976/131/ 21.17 H	R= 6.0 R_E	19 - 1976/133/ 3.67 H	R= 19.2 R_E
10 - 1976/131/ 22.50 H	R= 8.2 R_E	20 - 1976/133/ 4.67 H	R= 18.8 R_E

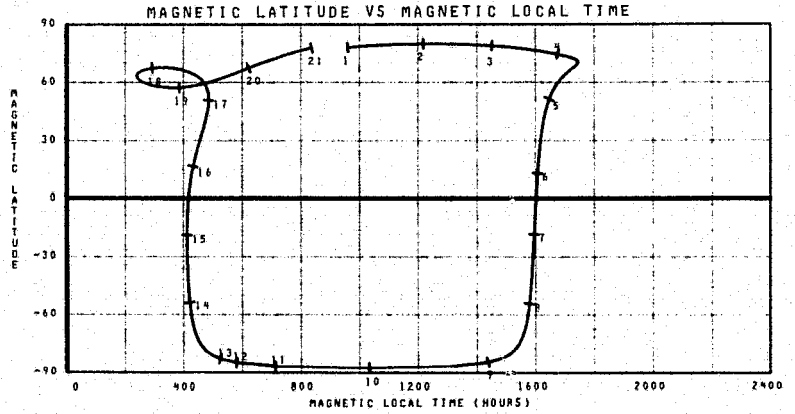
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/131/ 4.00H TO 1976/133/ 5.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

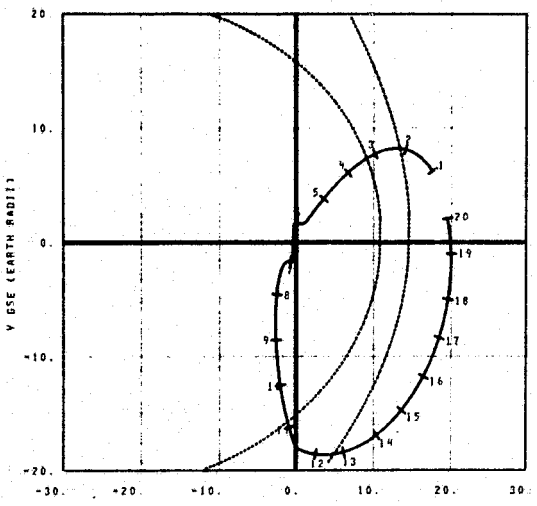
1 - 1976/131/ 4.50 H	R= 17.5 R_E	8 - 1976/131/ 18.75 H	R= 1.7 R_E	15 - 1976/131/ 20.82 H	R= 3.8 R_E
2 - 1976/131/ 6.33 H	R= 16.5 R_E	9 - 1976/131/ 18.95 H	R= 1.0 R_E	16 - 1976/131/ 22.50 H	R= 8.2 R_E
3 - 1976/131/ 8.00 H	R= 15.4 R_E	10 - 1976/131/ 18.98 H	R= 1.0 R_E	17 - 1976/132/ 4.17 H	R= 14.1 R_E
4 - 1976/131/ 10.83 H	R= 13.1 R_E	11 - 1976/131/ 19.00 H	R= 1.0 R_E	18 - 1976/132/ 10.67 H	R= 10.3 R_E
5 - 1976/131/ 17.08 H	R= 4.8 R_E	12 - 1976/131/ 19.02 H	R= 1.0 R_E	19 - 1976/132/ 19.17 H	R= 20.2 R_E
6 - 1976/131/ 18.17 H	R= 2.5 R_E	13 - 1976/131/ 19.03 H	R= 1.9 R_E	20 - 1976/133/ 1.17 H	R= 19.0 R_E
7 - 1976/131/ 18.50 H	R= 1.9 R_E	14 - 1976/131/ 19.32 H	R= 2.3 R_E	21 - 1976/133/ 4.67 H	R= 18.0 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/131 / 4.00H TO1976/133 / 5.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/133/	5.17H	LAT=	75.0	11 - 1976/134/	10.00H	LAT=	73.0
2 - 1976/133/	9.83H	LAT=	69.0	12 - 1976/134/	15.00H	LAT=	78.8
3 - 1976/133/	14.33H	LAT=	60.0	13 - 1976/134/	17.00H	LAT=	80.4
4 - 1976/133/	17.67H	LAT=	47.7	14 - 1976/134/	19.00H	LAT=	81.4
5 - 1976/133/	20.08H	LAT=	25.4	15 - 1976/134/	20.50H	LAT=	81.7
6 - 1976/133/	21.92H	LAT=	-76.7	16 - 1976/134/	22.00H	LAT=	81.8
7 - 1976/133/	22.17H	LAT=	-60.7	17 - 1976/134/	23.50H	LAT=	81.5
8 - 1976/133/	23.92H	LAT=	30.1	18 - 1976/135/	1.00H	LAT=	81.0
9 - 1976/134/	2.25H	LAT=	51.9	19 - 1976/135/	3.00H	LAT=	79.8
10 - 1976/134/	5.50H	LAT=	69.1	20 - 1976/135/	5.00H	LAT=	78.3

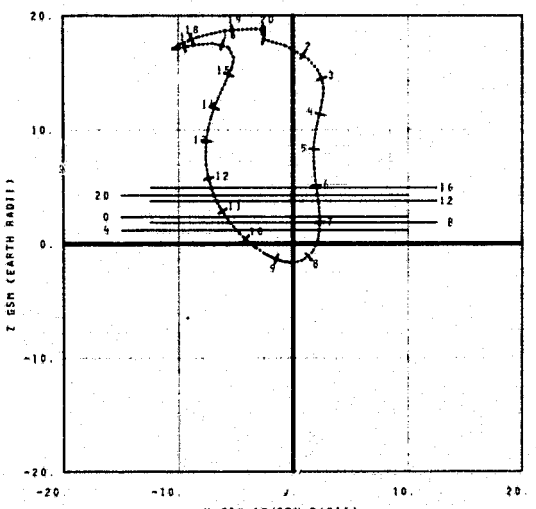
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/133/ 5.00H TO 1976/135/ 6.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/133/	5.17H	R=	10.7R_E	11 - 1976/134/	1.17H	R=	7.3R_E
2 - 1976/133/	8.17H	R=	17.3R_E	12 - 1976/134/	2.83H	R=	9.7R_E
3 - 1976/133/	11.00H	R=	15.6R_E	13 - 1976/134/	4.83H	R=	12.0R_E
4 - 1976/133/	14.50H	R=	12.7R_E	14 - 1976/134/	6.83H	R=	13.9R_E
5 - 1976/133/	17.17H	R=	9.7R_E	15 - 1976/134/	9.50H	R=	15.9R_E
6 - 1976/133/	19.25H	R=	6.4R_E	16 - 1976/134/	14.50H	R=	18.5R_E
7 - 1976/133/	20.75H	R=	3.8R_E	17 - 1974/134/	18.50H	R=	19.7R_E
8 - 1976/133/	21.83H	R=	1.8R_E	18 - 1976/135/	1.00H	R=	20.2R_E
9 - 1976/133/	22.65H	R=	2.4R_E	19 - 1976/135/	4.00H	R=	19.9R_E
10 - 1976/133/	23.75H	R=	4.9R_E	20 - 1976/135/	6.00H	R=	19.4R_E

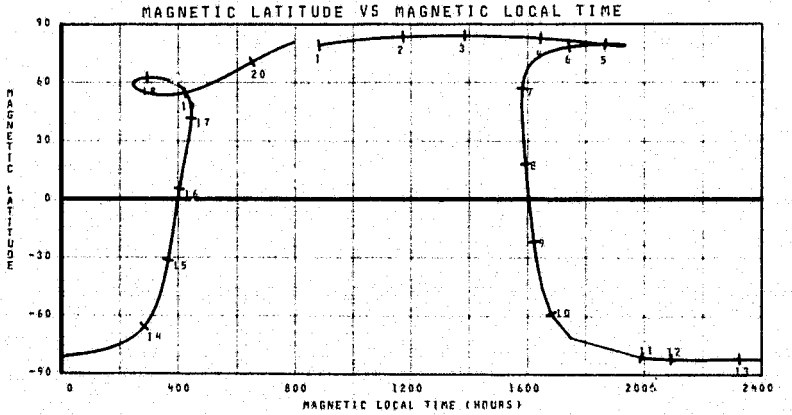
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/133/ 5.00H TO 1976/135/ 6.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

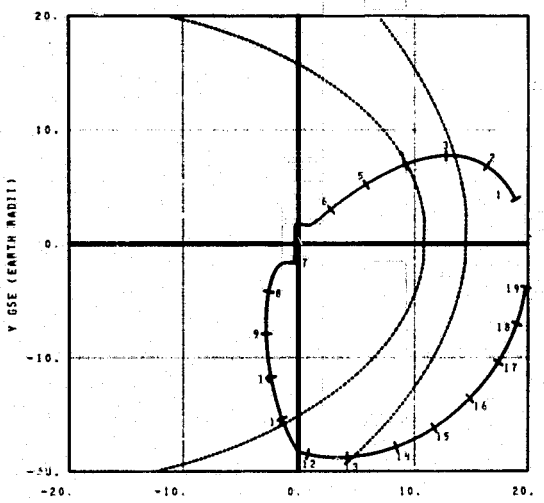
1 - 1976/133/	5.17H	R=	10.7R_E	8 - 1976/133/	21.33H	R=	2.6R_E	15 - 1976/133/	22.83H	R=	3.8R_E
2 - 1976/133/	7.17H	R=	17.4R_E	9 - 1976/133/	21.75H	R=	1.9R_E	16 - 1976/134/	0.17H	R=	5.6R_E
3 - 1976/133/	8.17H	R=	17.3R_E	10 - 1976/133/	22.00H	R=	1.7R_E	17 - 1976/134/	4.86H	R=	11.1R_E
4 - 1976/133/	9.67H	R=	16.4R_E	11 - 1976/133/	22.17H	R=	1.8R_E	18 - 1976/134/	10.50K	R=	16.5R_E
5 - 1974/133/	12.33H	R=	14.6R_E	12 - 1976/133/	22.18H	R=	1.8R_E	19 - 1976/134/	20.50H	R=	20.1R_E
6 - 1976/133/	17.83H	R=	8.8R_E	13 - 1976/133/	22.22H	R=	1.8R_E	20 - 1976/135/	3.00H	R=	20.0R_E
7 - 1976/133/	20.25H	R=	4.9R_E	14 - 1976/133/	22.38H	R=	2.1R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/133 / 5.00H TO1976/135 / 6.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/135/	6.50 H	LAT=	77.0	11 - 1976/136/	12.00 H	LAT=	71.0
2 - 1976/135/	10.50 H	LAT=	72.6	12 - 1976/136/	17.67 H	LAT=	78.3
3 - 1976/135/	15.00 H	LAT=	65.7	13 - 1976/136/	19.67 H	LAT=	80.0
4 - 1976/135/	18.83 H	LAT=	56.3	14 - 1976/136/	21.67 H	LAT=	81.1
5 - 1976/135/	21.75 H	LAT=	42.2	15 - 1976/136/	23.17 H	LAT=	81.6
6 - 1976/135/	23.83 H	LAT=	14.2	16 - 1976/137/	0.67 H	LAT=	81.8
7 - 1976/136/	1.25 H	LAT=	-78.5	17 - 1976/137/	2.17 H	LAT=	81.7
8 - 1976/136/	3.00 H	LAT=	27.7	18 - 1976/137/	3.67 H	LAT=	81.2
9 - 1976/136/	5.08 H	LAT=	49.5	19 - 1976/137/	5.17 H	LAT=	80.5
10 - 1976/136/	8.00 H	LAT=	62.0				

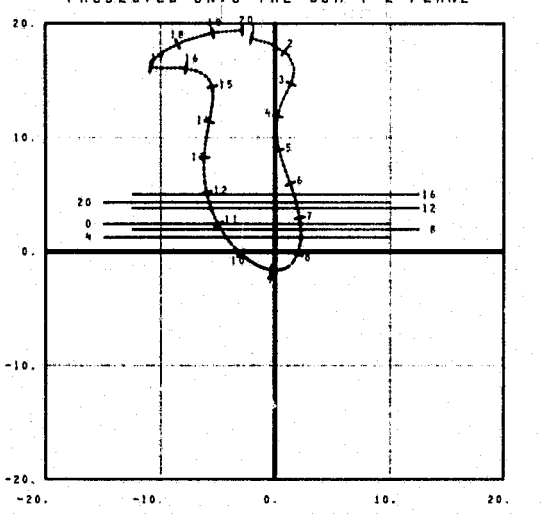
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/135/ 6.00H TO 1976/137/ 7.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/135/	6.50 H	R=	19.3 R_E	11 - 1976/136/	3.67 H	R=	6.1 R_E
2 - 1976/135/	9.50 H	R=	18.2 R_E	12 - 1976/136/	5.08 H	R=	8.4 R_E
3 - 1976/135/	14.00 H	R=	15.7 R_E	13 - 1976/136/	6.83 H	R=	10.6 R_E
4 - 1976/135/	17.33 H	R=	13.0 R_E	14 - 1976/136/	9.00 H	R=	12.9 R_E
5 - 1976/135/	20.00 H	R=	10.2 R_E	15 - 1976/136/	12.17 H	R=	15.5 R_E
6 - 1976/135/	22.00 H	R=	7.4 R_E	16 - 1976/136/	16.17 H	R=	17.9 R_E
7 - 1976/135/	23.50 H	R=	4.8 R_E	17 - 1976/136/	20.67 H	R=	19.5 R_E
8 - 1976/136/	0.67 H	R=	2.4 R_E	18 - 1976/137/	2.17 H	R=	20.3 R_E
9 - 1976/136/	1.52 H	R=	1.9 R_E	19 - 1976/137/	4.67 H	R=	20.2 R_E
10 - 1976/136/	2.43 H	R=	3.0 R_E	20 - 1976/137/	6.67 H	R=	20.0 R_E

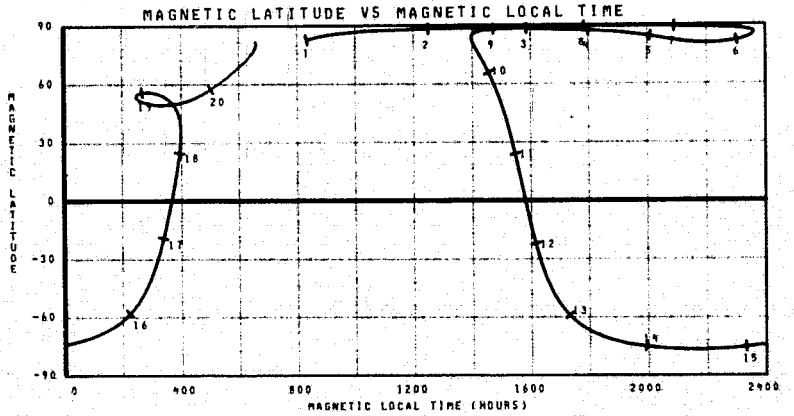
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/135/ 6.00H TO 1976/137/ 7.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

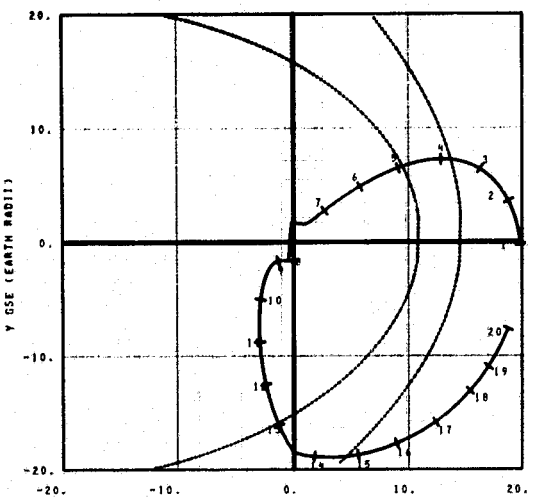
1 - 1976/135/	6.50 H	R=	19.3 R_E	8 - 1976/135/	19.33 H	R=	10.9 R_E	15 - 1976/136/	1.40 H	R=	1.0 R_E
2 - 1976/135/	8.50 H	R=	18.6 R_E	9 - 1976/135/	19.67 H	R=	10.6 R_E	16 - 1976/136/	1.90 H	R=	2.0 R_E
3 - 1976/135/	9.00 H	R=	18.4 R_E	10 - 1976/135/	22.50 H	R=	6.4 R_E	17 - 1976/136/	2.13 H	R=	3.1 R_E
4 - 1976/135/	9.50 H	R=	18.2 R_E	11 - 1976/136/	0.33 H	R=	3.1 R_E	18 - 1976/136/	4.00 H	R=	6.0 R_E
5 - 1976/135/	11.00 H	R=	17.5 R_E	12 - 1976/136/	0.92 H	R=	1.9 R_E	19 - 1976/136/	11.33 H	R=	19.9 R_E
6 - 1976/135/	16.33 H	R=	13.9 R_E	13 - 1976/136/	1.10 H	R=	1.7 R_E	20 - 1976/136/	23.67 H	R=	20.1 R_E
7 - 1976/135/	19.17 H	R=	11.1 R_E	14 - 1976/136/	1.32 H	R=	1.7 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/135 / 6.00H TO1976/137 / 7.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/137/ 7.17H	LAT= 79.2	11 - 1976/138/ 8.92H	LAT= 52.9
2 - 1976/137/ 10.17H	LAT= 76.6	12 - 1976/138/ 12.00H	LAT= 49.1
3 - 1976/137/ 14.17H	LAT= 72.1	13 - 1976/138/ 16.33H	LAT= 72.7
4 - 1976/137/ 18.50H	LAT= 65.2	14 - 1976/138/ 22.00H	LAT= 79.2
5 - 1976/137/ 22.33H	LAT= 55.3	15 - 1976/138/ 24.00H	LAT= 88.6
6 - 1976/138/ 1.08H	LAT= 41.3	16 - 1976/139/ 1.50H	LAT= 81.9
7 - 1976/138/ 3.17H	LAT= 10.7	17 - 1976/139/ 3.00H	LAT= 81.8
8 - 1976/138/ 4.50H	LAT= -73.8	18 - 1976/139/ 4.50H	LAT= 81.8
9 - 1976/138/ 4.83H	LAT= -30.5	19 - 1976/139/ 5.50H	LAT= 81.7
10 - 1976/138/ 6.67H	LAT= 34.6	20 - 1976/139/ 7.00H	LAT= 81.2

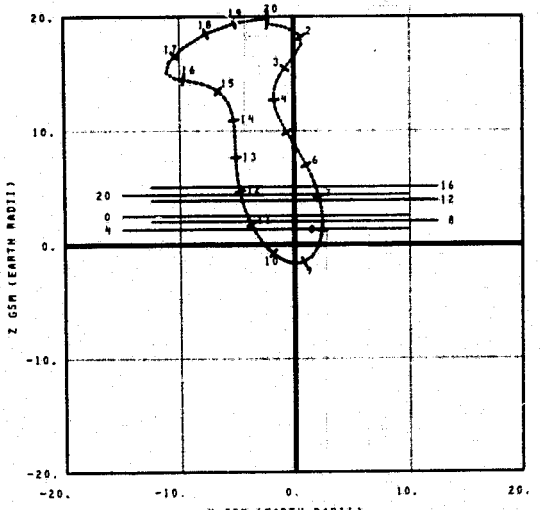
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/137/ 7.00H TO 1976/139/ 8.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/137/ 7.17H	R= 19.9R_E	11 - 1976/138/ 6.25H	R= 5.0R_E
2 - 1976/137/ 11.17H	R= 18.0R_E	12 - 1976/138/ 7.50H	R= 7.3R_E
3 - 1976/137/ 16.17H	R= 16.4R_E	13 - 1976/138/ 9.25H	R= 9.7R_E
4 - 1976/137/ 19.50H	R= 13.9R_E	14 - 1976/138/ 11.67H	R= 12.9R_E
5 - 1976/137/ 22.33H	R= 11.2R_E	15 - 1976/138/ 14.83H	R= 15.1R_E
6 - 1976/138/ 0.50H	R= 8.9R_E	16 - 1976/138/ 18.50H	R= 17.4R_E
7 - 1976/138/ 2.00H	R= 6.1R_E	17 - 1976/139/ 0.50H	R= 19.6R_E
8 - 1976/138/ 3.25H	R= 3.7R_E	18 - 1976/139/ 3.50H	R= 20.1R_E
9 - 1976/138/ 4.33H	R= 1.7R_E	19 - 1976/139/ 5.50H	R= 20.3R_E
10 - 1976/138/ 5.15H	R= 2.7R_E	20 - 1976/139/ 8.00H	R= 20.2R_E

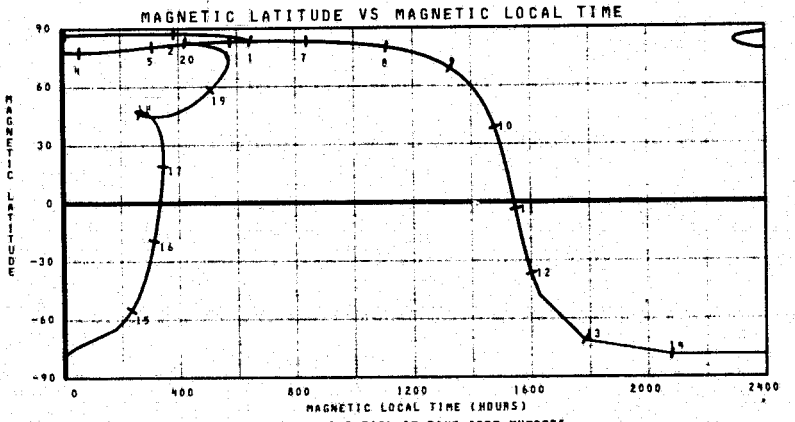
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/137/ 7.00H TO 1976/139/ 8.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

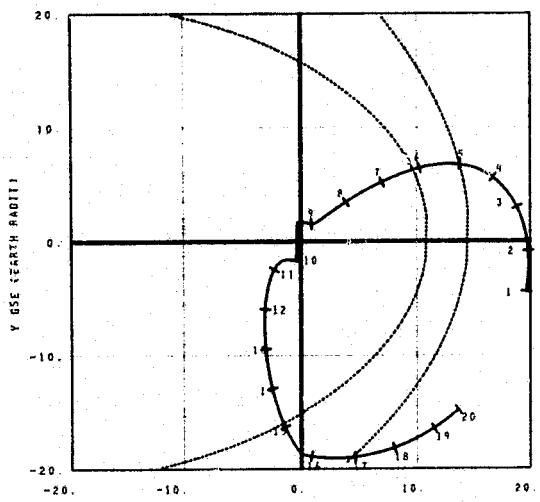
1 - 1976/137/ 7.17H	R= 19.9R_E	8 - 1976/137/ 22.67H	R= 10.8R_E	15 - 1976/138/ 9.75H	R= 2.0R_E
2 - 1976/137/ 8.67H	R= 19.6R_E	9 - 1976/138/ 0.50H	R= 8.5R_E	16 - 1976/138/ 5.17H	R= 2.9R_E
3 - 1976/137/ 9.67H	R= 19.3R_E	10 - 1976/138/ 2.83H	R= 4.5R_E	17 - 1976/138/ 6.42H	R= 5.3R_E
4 - 1976/137/ 15.67H	R= 16.7R_E	11 - 1976/138/ 3.83H	R= 2.5R_E	18 - 1976/138/ 15.00H	R= 15.2R_E
5 - 1976/137/ 16.83H	R= 14.9R_E	12 - 1976/138/ 4.17H	R= 1.9R_E	19 - 1976/139/ 1.00H	R= 19.7R_E
6 - 1976/137/ 20.58H	R= 13.1R_E	13 - 1976/138/ 4.42H	R= 1.7R_E	20 - 1976/139/ 8.00H	R= 20.2R_E
7 - 1976/137/ 21.50H	R= 12.1R_E	14 - 1976/138/ 4.58H	R= 1.7R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/137 / 7.00H TO1976/139 / 8.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/139/	8.50 H	LAT=	80.5	11 - 1976/140/	8.67 H	LAT=	7.2
2 - 1976/139/	10.50 H	LAT=	79.2	12 - 1976/140/	10.42 H	LAT=	40.7
3 - 1976/139/	13.50 H	LAT=	76.6	13 - 1976/140/	12.67 H	LAT=	55.4
4 - 1976/139/	17.00 H	LAT=	72.6	14 - 1976/140/	15.67 H	LAT=	65.2
5 - 1976/139/	20.83 H	LAT=	66.9	15 - 1976/140/	19.83 H	LAT=	73.1
6 - 1976/140/	0.67 H	LAT=	58.2	16 - 1976/141/	1.17 H	LAT=	79.1
7 - 1976/140/	3.50 H	LAT=	46.7	17 - 1976/141/	3.17 H	LAT=	80.6
8 - 1976/140/	5.67 H	LAT=	26.3	18 - 1976/141/	4.67 H	LAT=	81.3
9 - 1976/140/	7.92 H	LAT=	-58.3	19 - 1976/141/	6.17 H	LAT=	81.7
10 - 1976/140/	7.68 H	LAT=	-77.5	20 - 1976/141/	7.17 H	LAT=	81.8

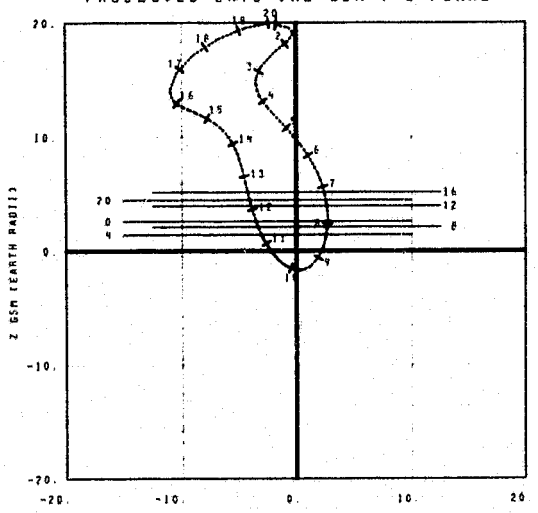
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/139/ 8.00H TO 1976/141/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/139/	8.50 H	R=	20.1 R_E	11 - 1976/140/	8.00 H	R=	3.7 R_E
2 - 1976/139/	10.50 H	R=	18.8 R_E	12 - 1976/140/	10.08 H	R=	6.1 R_E
3 - 1976/139/	13.50 H	R=	16.9 R_E	13 - 1976/140/	11.67 H	R=	8.6 R_E
4 - 1976/139/	22.00 H	R=	14.5 R_E	14 - 1976/140/	13.83 H	R=	11.3 R_E
5 - 1976/140/	0.67 H	R=	12.1 R_E	15 - 1976/140/	16.83 H	R=	14.2 R_E
6 - 1976/140/	2.67 H	R=	9.9 R_E	16 - 1976/140/	20.33 H	R=	16.6 R_E
7 - 1976/140/	4.33 H	R=	7.5 R_E	17 - 1976/141/	1.17 H	R=	18.9 R_E
8 - 1976/140/	5.83 H	R=	5.0 R_E	18 - 1976/141/	3.67 H	R=	19.6 R_E
9 - 1976/140/	7.00 H	R=	2.5 R_E	19 - 1976/141/	6.17 H	R=	20.1 R_E
10 - 1976/140/	7.87 H	R=	1.0 R_E	20 - 1976/141/	8.67 H	R=	20.3 R_E

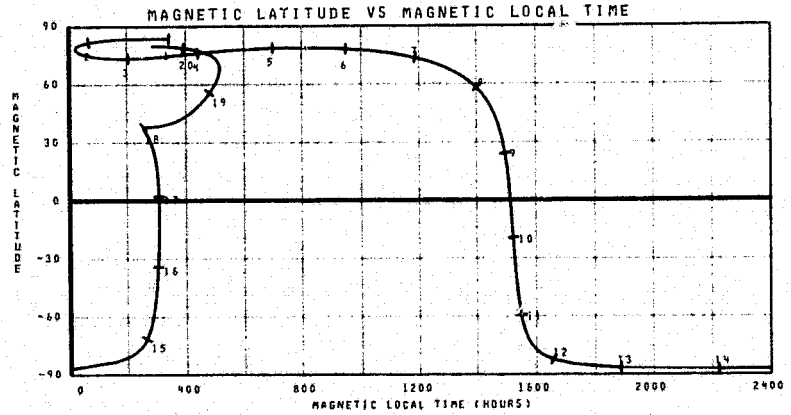
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/139/ 8.00H TO 1976/141/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

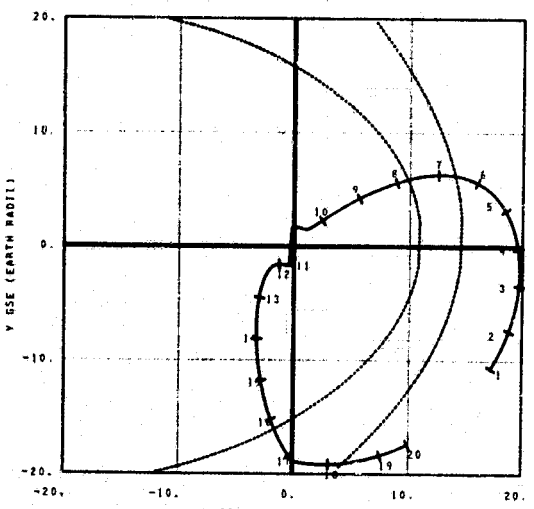
1 - 1976/139/	8.50 H	R=	20.1 R_E	8 - 1976/140/	4.00 H	R=	7.9 R_E	15 - 1976/140/	7.82 H	R=	1.8 R_E
2 - 1976/139/	10.50 H	R=	19.9 R_E	9 - 1976/140/	4.33 H	R=	4.0 R_E	16 - 1976/140/	8.15 H	R=	2.3 R_E
3 - 1976/139/	17.00 H	R=	17.7 R_E	10 - 1976/140/	7.17 H	R=	2.2 R_E	17 - 1976/140/	8.4 H	R=	5.8 R_E
4 - 1976/139/	20.17 H	R=	18.9 R_E	11 - 1976/140/	7.50 H	R=	1.7 R_E	18 - 1976/140/	14.00 H	R=	11.5 R_E
5 - 1976/139/	22.33 H	R=	14.3 R_E	12 - 1976/140/	7.65 H	R=	1.7 R_E	19 - 1976/141/	1.17 H	R=	18.9 R_E
6 - 1976/139/	23.83 H	R=	12.9 R_E	13 - 1976/140/	7.68 H	R=	1.7 R_E	20 - 1976/141/	7.67 H	R=	20.2 R_E
7 - 1976/140/	1.50 H	R=	11.2 R_E	14 - 1976/140/	7.70 H	R=	1.7 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/139 / 8.00H TO1976/141 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/141/ 9.17H	LAT= 81.6	11 - 1976/142/ 10.92H	LAT= -75.0
2 - 1976/141/ 10.67H	LAT= 81.1	12 - 1976/142/ 11.23H	LAT= -34.8
3 - 1976/141/ 12.67H	LAT= 80.0	13 - 1976/142/ 12.92H	LAT= 32.0
4 - 1976/141/ 14.67H	LAT= 78.5	14 - 1976/142/ 15.00H	LAT= 56.9
5 - 1976/141/ 17.67H	LAT= 75.7	15 - 1976/142/ 17.83H	LAT= 62.3
6 - 1976/141/ 21.67H	LAT= 70.8	16 - 1976/142/ 21.50H	LAT= 70.5
7 - 1976/142/ 1.83H	LAT= 63.5	17 - 1976/143/ 3.00H	LAT= 77.8
8 - 1976/142/ 5.33H	LAT= 53.3	18 - 1976/143/ 6.00H	LAT= 80.3
9 - 1976/142/ 7.83H	LAT= 38.8	19 - 1976/143/ 8.00H	LAT= 81.3
10 - 1976/142/ 9.83H	LAT= 2.5	20 - 1976/143/ 9.00H	LAT= 81.6

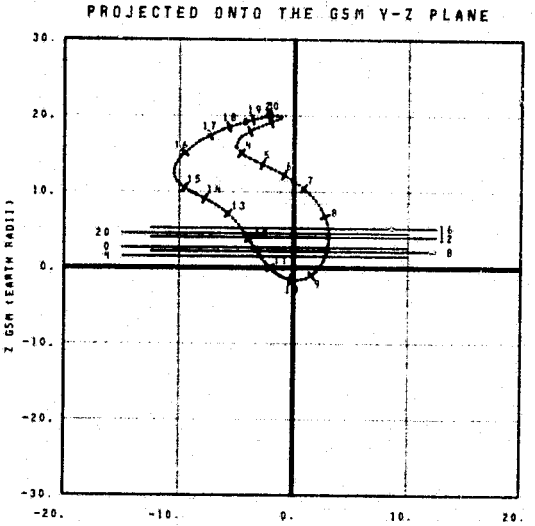
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/141/ 9.00H TO 1976/143/10.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/141/ 9.17H	R= 20.3RE	11 - 1976/142/ 11.73H	R= 3.1RE
2 - 1976/141/ 10.67H	R= 19.7RE	12 - 1976/142/ 13.42H	R= 6.3RE
3 - 1976/141/ 17.17H	R= 19.0RE	13 - 1976/142/ 15.75H	R= 9.8RE
4 - 1976/141/ 22.17H	R= 16.6RE	14 - 1976/142/ 18.00H	R= 12.3RE
5 - 1976/142/ 0.67H	R= 15.0RE	15 - 1976/142/ 20.33H	R= 14.9RE
6 - 1976/142/ 2.50H	R= 13.9RE	16 - 1976/143/ 2.00H	R= 17.9RE
7 - 1976/142/ 4.17H	R= 11.8RE	17 - 1976/143/ 4.50H	R= 18.9RE
8 - 1976/142/ 6.67H	R= 8.8RE	18 - 1976/143/ 6.00H	R= 19.4RE
9 - 1976/142/ 10.33H	R= 2.3RE	19 - 1976/143/ 8.00H	R= 19.9RE
10 - 1976/142/ 11.00H	R= 1.0RE	20 - 1976/143/ 10.00H	R= 20.1RE

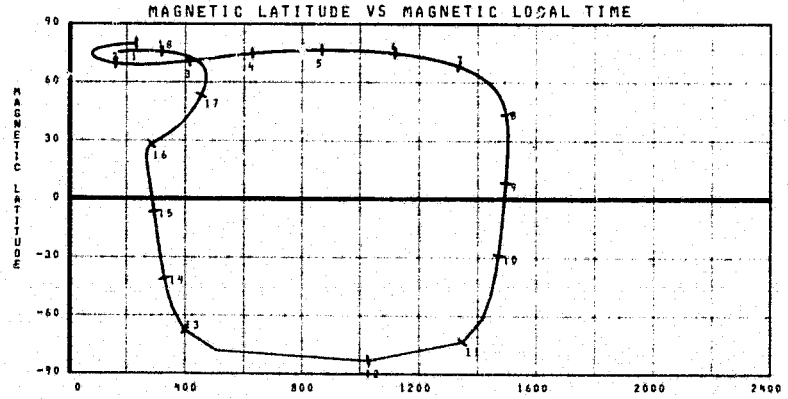
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/141/ 9.00H TO 1976/143/10.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

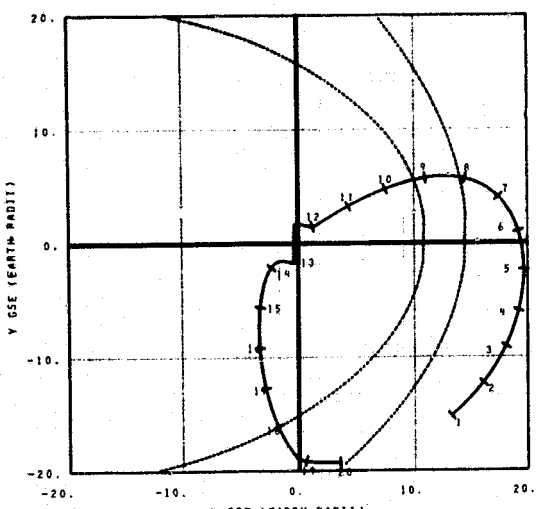
1 - 1976/141/ 9.17H	R= 20.3RE	8 - 1976/142/ 8.50H	R= 6.0RE	15 - 1976/142/ 11.98H	R= 3.6RE
2 - 1976/141/ 10.67H	R= 19.4RE	9 - 1976/142/ 10.00H	R= 3.0RE	16 - 1976/142/ 16.33H	R= 10.5RE
3 - 1976/141/ 20.17H	R= 17.7RE	10 - 1976/142/ 10.50H	R= 2.0RE	17 - 1976/143/ 1.50H	R= 17.7RE
4 - 1976/141/ 22.83H	R= 16.2RE	11 - 1976/142/ 10.83H	R= 1.7RE	18 - 1976/143/ 2.00H	R= 19.9RE
5 - 1976/142/ 0.83H	R= 14.8RE	12 - 1976/142/ 10.92H	R= 1.7RE		
6 - 1976/142/ 2.67H	R= 13.3RE	13 - 1976/142/ 11.08H	R= 1.8RE		
7 - 1976/142/ 4.83H	R= 11.1RE	14 - 1976/142/ 11.33H	R= 2.2RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/141 / 9.00H TO1976/143 /10.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/193/ 10.50 H	LAT= 81.6	11 - 1976/194/ 12.00 H	LAT= 27.9
2 - 1976/193/ 12.00 H	LAT= 81.7	12 - 1976/194/ 13.75 H	LAT= -46.7
3 - 1976/193/ 13.50 H	LAT= 81.2	13 - 1976/194/ 14.12 H	LAT= -76.7
4 - 1976/193/ 15.00 H	LAT= 80.5	14 - 1976/194/ 15.00 H	LAT= 3.2
5 - 1976/193/ 17.00 H	LAT= 79.2	15 - 1976/194/ 16.75 H	LAT= 39.6
6 - 1976/193/ 19.50 H	LAT= 77.1	16 - 1976/194/ 19.00 H	LAT= 56.8
7 - 1976/193/ 23.00 H	LAT= 73.3	17 - 1976/194/ 22.00 H	LAT= 69.8
8 - 1976/194/ 3.00 H	LAT= 67.5	18 - 1976/195/ 2.00 H	LAT= 72.5
9 - 1976/194/ 6.83 H	LAT= 59.1	19 - 1976/195/ 8.33 H	LAT= 79.6
10 - 1976/194/ 9.83 H	LAT= 47.4	20 - 1976/195/ 9.83 H	LAT= 80.6

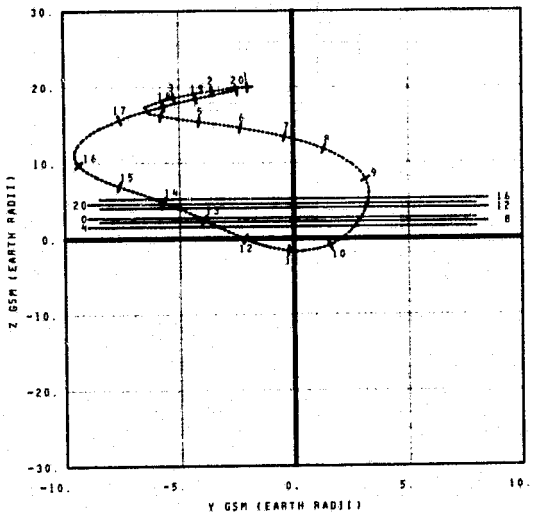
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/193/10.00H TO 1976/195/11.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/193/ 10.50 H	R= 20.2 R_E	11 - 1976/194/ 14.22 H	R= 1.0 R_E
2 - 1976/193/ 13.50 H	R= 20.1 R_E	12 - 1976/194/ 15.00 H	R= 3.2 R_E
3 - 1976/193/ 17.50 H	R= 19.7 R_E	13 - 1976/194/ 16.25 H	R= 5.7 R_E
4 - 1976/193/ 23.00 H	R= 17.9 R_E	14 - 1976/194/ 17.83 H	R= 8.2 R_E
5 - 1976/194/ 1.00 H	R= 16.9 R_E	15 - 1976/194/ 19.83 H	R= 10.0 R_E
6 - 1976/194/ 2.67 H	R= 15.8 R_E	16 - 1976/194/ 22.83 H	R= 13.0 R_E
7 - 1976/194/ 4.33 H	R= 14.6 R_E	17 - 1976/195/ 4.33 H	R= 17.5 R_E
8 - 1976/194/ 6.00 H	R= 13.2 R_E	18 - 1976/195/ 6.33 H	R= 18.4 R_E
9 - 1976/194/ 9.00 H	R= 10.0 R_E	19 - 1976/195/ 7.83 H	R= 19.0 R_E
10 - 1976/194/ 13.50 H	R= 2.4 R_E	20 - 1976/195/ 10.83 H	R= 19.8 R_E

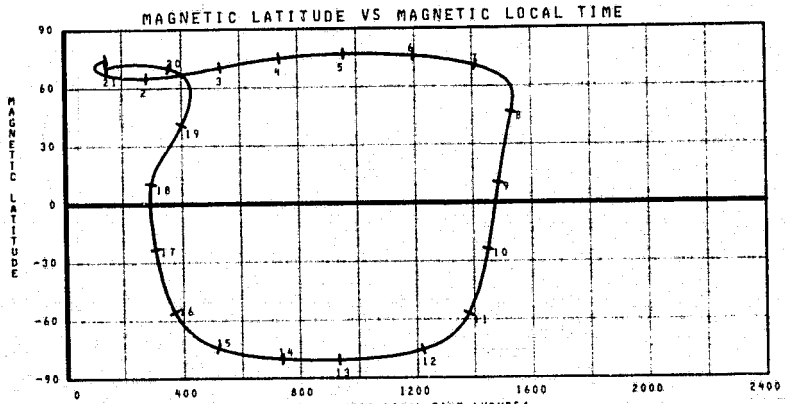
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/193/10.00H TO 1976/195/11.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

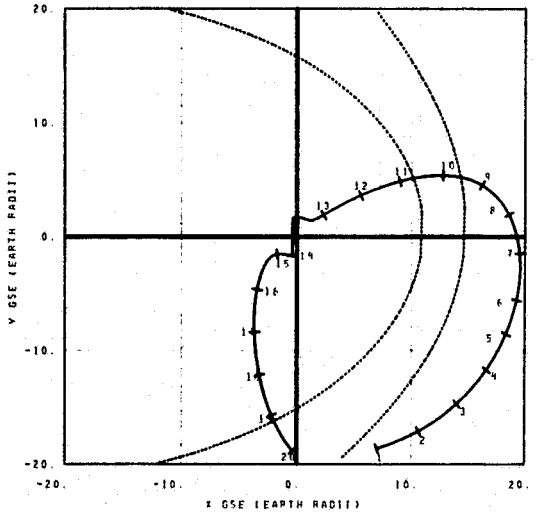
1 - 1976/193/ 10.50 H	R= 20.2 R_E	8 - 1976/194/ 11.92 H	R= 5.6 R_E	15 - 1976/194/ 14.50 H	R= 1.0 R_E
2 - 1976/193/ 18.00 H	R= 19.6 R_E	9 - 1976/194/ 13.33 H	R= 2.7 R_E	16 - 1976/194/ 14.48 H	R= 2.1 R_E
3 - 1976/193/ 22.50 H	R= 18.1 R_E	10 - 1976/194/ 13.75 H	R= 2.0 R_E	17 - 1976/194/ 15.00 H	R= 3.2 R_E
4 - 1976/194/ 1.00 H	R= 16.9 R_E	11 - 1976/194/ 14.00 H	R= 1.7 R_E	18 - 1976/194/ 16.92 H	R= 6.8 R_E
5 - 1976/194/ 2.83 H	R= 15.7 R_E	12 - 1976/194/ 14.13 H	R= 1.7 R_E	19 - 1976/194/ 23.67 H	R= 14.9 R_E
6 - 1976/194/ 4.67 H	R= 14.3 R_E	13 - 1976/194/ 14.20 H	R= 1.7 R_E	20 - 1976/195/ 6.83 H	R= 18.6 R_E
7 - 1976/194/ 7.00 H	R= 12.2 R_E	14 - 1976/194/ 14.23 H	R= 1.8 R_E	21 - 1976/195/ 10.83 H	R= 19.8 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/193 /10.00H TO1976/195 /11.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/145/ 11.33 H	LAT= 81.9	11 - 1976/146/ 12.00 H	LAT= 52.5
2 - 1976/145/ 12.83 H	LAT= 81.8	12 - 1976/146/ 14.50 H	LAT= 36.6
3 - 1976/145/ 14.33 H	LAT= 81.8	13 - 1976/146/ 16.42 H	LAT= -4.9
4 - 1976/145/ 15.83 H	LAT= 81.6	14 - 1976/146/ 17.33 H	LAT= -76.3
5 - 1976/145/ 17.33 H	LAT= 81.0	15 - 1976/146/ 17.78 H	LAT= -23.3
6 - 1976/145/ 18.83 H	LAT= 80.2	16 - 1976/146/ 19.50 H	LAT= 34.1
7 - 1976/145/ 21.33 H	LAT= 78.9	17 - 1976/146/ 21.67 H	LAT= 52.1
8 - 1976/146/ 0.33 H	LAT= 75.5	18 - 1976/147/ 0.67 H	LAT= 63.3
9 - 1976/146/ 4.33 H	LAT= 70.5	19 - 1976/147/ 4.67 H	LAT= 71.6
10 - 1976/146/ 8.50 H	LAT= 63.1	20 - 1976/147/ 10.50 H	LAT= 78.7

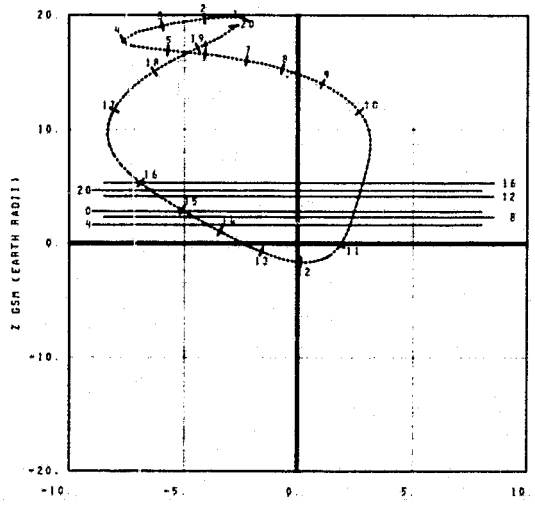
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/145/11.00H TO 1976/147/12.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/145/ 11.33 H	R= 19.9 R_E	11 - 1976/146/ 16.50 H	R= 2.8 R_E
2 - 1976/145/ 12.83 H	R= 20.3 R_E	12 - 1976/146/ 17.92 H	R= 1.4 R_E
3 - 1976/145/ 14.33 H	R= 20.2 R_E	13 - 1976/146/ 18.05 H	R= 2.8 R_E
4 - 1976/145/ 15.83 H	R= 19.8 R_E	14 - 1976/146/ 19.00 H	R= 4.0 R_E
5 - 1976/146/ 0.83 H	R= 18.5 R_E	15 - 1976/146/ 20.17 H	R= 6.9 R_E
6 - 1976/146/ 2.33 H	R= 17.8 R_E	16 - 1976/146/ 21.92 H	R= 9.9 R_E
7 - 1976/146/ 3.83 H	R= 17.1 R_E	17 - 1976/147/ 2.83 H	R= 14.5 R_E
8 - 1976/146/ 5.17 H	R= 16.3 R_E	18 - 1976/147/ 5.67 H	R= 16.5 R_E
9 - 1976/146/ 6.83 H	R= 15.1 R_E	19 - 1976/147/ 8.00 H	R= 17.7 R_E
10 - 1976/146/ 9.17 H	R= 13.2 R_E	20 - 1976/147/ 12.00 H	R= 19.3 R_E

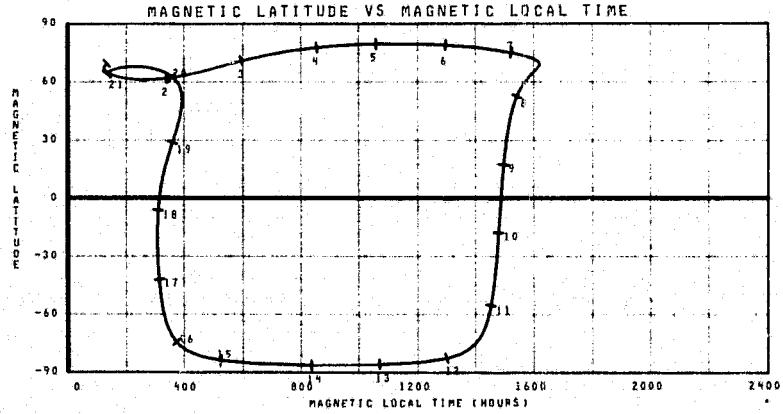
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/145/11.00H TO 1976/147/12.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

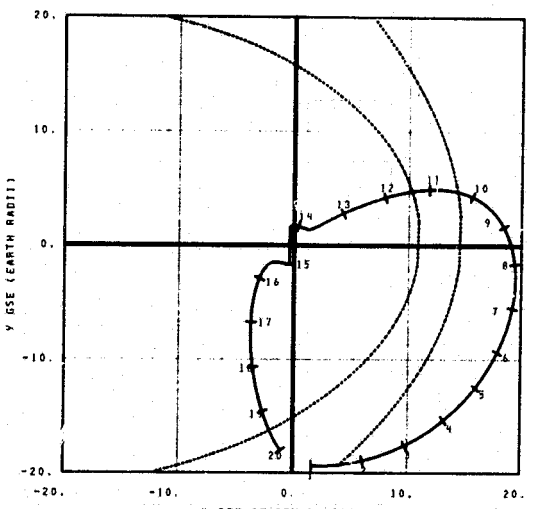
1 - 1976/145/ 11.33 H	R= 19.9 R_E	8 - 1976/146/ 15.42 H	R= 5.1 R_E	15 - 1976/146/ 17.92 H	R= 1.9 R_E
2 - 1976/145/ 13.33 H	R= 20.0 R_E	9 - 1976/146/ 16.53 H	R= 2.7 R_E	16 - 1976/146/ 17.60 H	R= 2.0 R_E
3 - 1976/146/ 0.33 H	R= 18.7 R_E	10 - 1976/146/ 16.98 H	R= 1.9 R_E	17 - 1976/146/ 17.98 H	R= 2.7 R_E
4 - 1976/146/ 3.33 H	R= 17.3 R_E	11 - 1976/146/ 17.25 H	R= 1.7 R_E	18 - 1976/146/ 19.00 H	R= 5.0 R_E
5 - 1976/146/ 4.83 H	R= 16.5 R_E	12 - 1976/146/ 17.43 H	R= 1.8 R_E	19 - 1976/146/ 22.00 H	R= 10.8 R_E
6 - 1976/146/ 6.50 H	R= 15.4 R_E	13 - 1976/146/ 17.67 H	R= 1.8 R_E	20 - 1976/147/ 5.83 H	R= 16.6 R_E
7 - 1976/146/ 9.00 H	R= 13.4 R_E	14 - 1976/146/ 17.98 H	R= 1.8 R_E	21 - 1976/147/ 12.00 H	R= 19.3 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/145 /11.00H TO1976/147 /12.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/147/ 12.50 H	LAT=	80.3	11 - 1976/148/ 12.83 H	LAT=	60.4
2 - 1976/147/ 14.50 H	LAT=	81.3	12 - 1976/148/ 16.17 H	LAT=	48.8
3 - 1976/147/ 16.00 H	LAT=	81.8	13 - 1976/148/ 18.58 H	LAT=	25.5
4 - 1976/147/ 17.50 H	LAT=	81.8	14 - 1976/148/ 20.42 H	LAT=	-77.7
5 - 1976/147/ 19.00 H	LAT=	81.6	15 - 1976/148/ 20.55 H	LAT=	-75.9
6 - 1976/147/ 20.50 H	LAT=	81.1	16 - 1976/148/ 21.92 H	LAT=	19.4
7 - 1976/147/ 22.50 H	LAT=	79.9	17 - 1976/148/ 23.92 H	LAT=	46.8
8 - 1976/148/ 1.00 H	LAT=	78.0	18 - 1976/149/ 2.67 H	LAT=	59.6
9 - 1976/148/ 4.00 H	LAT=	75.1	19 - 1976/149/ 6.50 H	LAT=	69.2
10 - 1976/148/ 8.50 H	LAT=	69.1	20 - 1976/149/ 11.83 h	LAT=	76.9

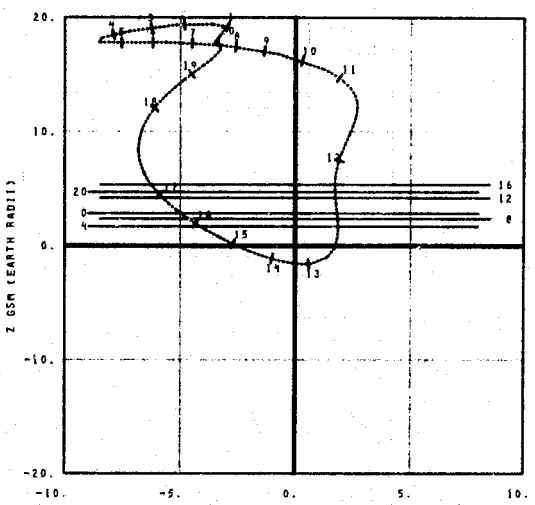
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/147/12.00H TO 1976/149/13.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/147/ 12.50 H	R= 19.4 R_E	11 - 1976/148/ 9.00 H	R= 15.9 R_E
2 - 1976/147/ 15.50 H	R= 20.0 R_E	12 - 1976/148/ 15.83 H	R= 9.9 R_E
3 - 1976/147/ 17.00 H	R= 20.2 R_E	13 - 1976/148/ 20.55 H	R= 1.7 R_E
4 - 1976/147/ 19.00 H	R= 20.3 R_E	14 - 1976/148/ 21.10 H	R= 2.5 R_E
5 - 1976/147/ 24.00 H	R= 19.7 R_E	15 - 1976/148/ 21.83 H	R= 4.0 R_E
6 - 1976/148/ 1.50 H	R= 19.4 R_E	16 - 1976/148/ 22.83 H	R= 6.8 R_E
7 - 1976/148/ 3.00 H	R= 18.9 R_E	17 - 1976/149/ 0.33 H	R= 8.3 R_E
8 - 1976/148/ 4.50 H	R= 18.3 R_E	18 - 1976/149/ 5.33 H	R= 13.9 R_E
9 - 1976/148/ 5.50 H	R= 17.9 R_E	19 - 1976/149/ 8.00 H	R= 15.9 R_E
10 - 1976/148/ 7.00 H	R= 17.1 R_E	20 - 1976/149/ 12.83 H	R= 18.5 R_E

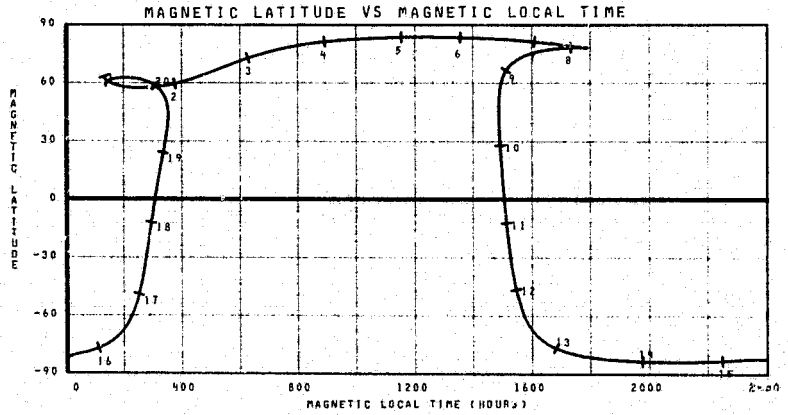
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/147/12.00H TO 1976/149/13.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

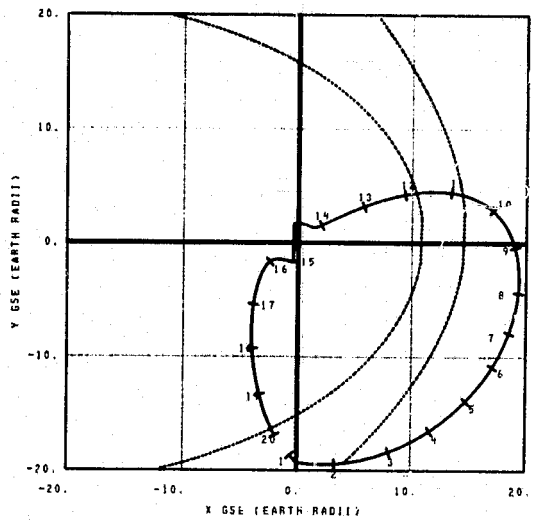
1 - 1976/147/ 12.50 H	R= 19.4 R_E	8 - 1976/148/ 15.33 H	R= 10.1 R_E	15 - 1976/148/ 20.72 H	R= 1.8 R_E
2 - 1976/147/ 20.50 H	R= 20.2 R_E	9 - 1976/148/ 18.08 H	R= 6.1 R_E	16 - 1976/148/ 20.78 H	R= 1.9 R_E
3 - 1976/148/ 2.00 H	R= 19.2 R_E	10 - 1976/148/ 19.67 H	R= 2.9 R_E	17 - 1976/148/ 21.08 H	R= 2.5 R_E
4 - 1976/148/ 5.00 H	R= 18.1 R_E	11 - 1976/148/ 20.17 H	R= 2.0 R_E	18 - 1976/148/ 21.92 H	R= 4.2 R_E
5 - 1976/148/ 6.50 H	R= 17.4 R_E	12 - 1976/148/ 20.42 H	R= 1.7 R_E	19 - 1976/149/ 0.42 H	R= 8.5 R_E
6 - 1976/148/ 7.50 H	R= 16.8 R_E	13 - 1976/148/ 20.62 H	R= 1.7 R_E	20 - 1976/149/ 6.33 H	R= 14.7 R_E
7 - 1976/148/ 9.33 H	R= 15.7 R_E	14 - 1976/148/ 20.68 H	R= 1.8 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/147 /12.00H TO19/6/149 /13.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/149/ 13.33 H	LAT= 78.9	11 - 1976/150/ 19.50 H	LAT= 69.1
2 - 1976/149/ 16.83 H	LAT= 80.9	12 - 1976/150/ 18.33 H	LAT= 93.0
3 - 1976/149/ 18.83 H	LAT= 81.7	13 - 1976/150/ 21.00 H	LAT= 36.0
4 - 1976/149/ 20.33 H	LAT= 81.9	14 - 1976/150/ 23.00 H	LAT= -10.5
5 - 1976/149/ 21.83 H	LAT= 81.7	15 - 1976/150/ 23.77 H	LAT= -75.5
6 - 1976/149/ 23.33 H	LAT= 81.3	16 - 1976/151/ 0.52 H	LAT= -2.9
7 - 1976/150/ 0.83 H	LAT= 80.5	17 - 1976/151/ 2.42 H	LAT= 39.7
8 - 1976/150/ 2.83 H	LAT= 79.2	18 - 1976/151/ 4.83 H	LAT= 55.5
9 - 1976/150/ 5.83 H	LAT= 76.6	19 - 1976/151/ 8.33 H	LAT= 66.3
10 - 1976/150/ 9.83 H	LAT= 71.9	20 - 1976/151/ 13.00 H	LAT= 74.3

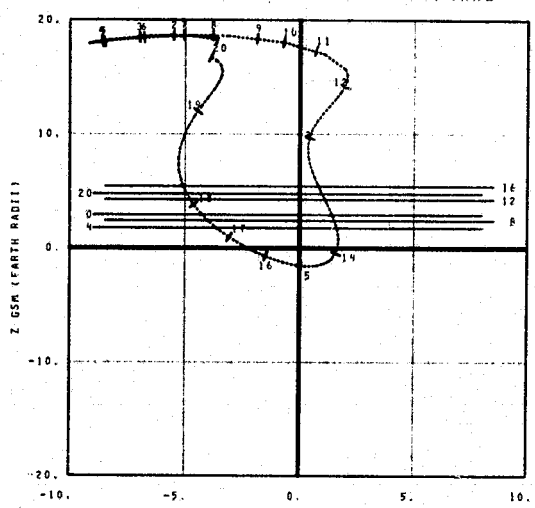
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/149/13.00H TO 1976/151/14.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/149/ 13.33 H	R= 18.6 R_E	11 - 1976/150/ 9.33 H	R= 18.0 R_E
2 - 1976/149/ 15.83 H	R= 19.4 R_E	12 - 1976/150/ 12.83 H	R= 15.5 R_E
3 - 1976/149/ 17.33 H	R= 19.8 R_E	13 - 1976/150/ 17.50 H	R= 11.3 R_E
4 - 1976/149/ 19.33 H	R= 20.1 R_E	14 - 1976/150/ 23.17 H	R= 2.3 R_E
5 - 1976/149/ 23.83 H	R= 20.2 R_E	15 - 1976/150/ 23.95 H	R= 1.9 R_E
6 - 1976/150/ 1.83 H	R= 20.0 R_E	16 - 1976/151/ 0.52 H	R= 2.9 R_E
7 - 1976/150/ 3.33 H	R= 19.7 R_E	17 - 1976/151/ 1.33 H	R= 4.6 R_E
8 - 1976/150/ 4.33 H	R= 19.5 R_E	18 - 1976/151/ 2.75 H	R= 7.1 R_E
9 - 1976/150/ 5.83 H	R= 19.0 R_E	19 - 1976/151/ 7.83 H	R= 13.2 R_E
10 - 1976/150/ 6.83 H	R= 18.7 R_E	20 - 1976/151/ 13.50 H	R= 17.3 R_E

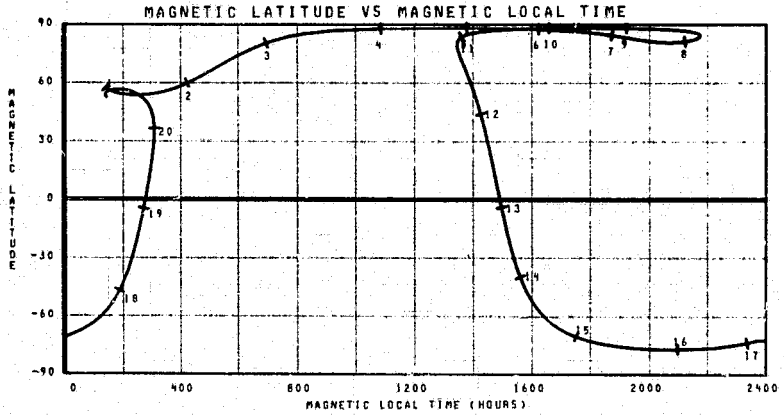
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/149/13.00H TO 1976/151/14.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

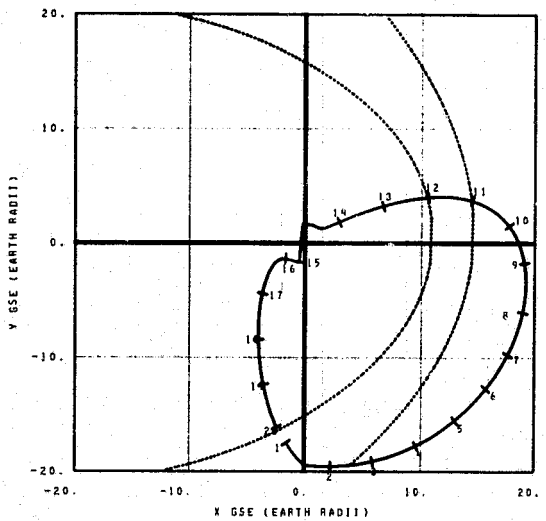
1 - 1976/149/ 13.33 H	R= 18.6 R_E	8 - 1976/150/ 19.50 H	R= 14.2 R_E	15 - 1976/150/ 23.77 H	R= 1.7 R_E
2 - 1976/149/ 22.33 H	R= 20.3 R_E	9 - 1976/150/ 17.83 H	R= 10.9 R_E	16 - 1976/150/ 23.87 H	R= 1.8 R_E
3 - 1976/150/ 4.83 H	R= 19.3 R_E	10 - 1976/150/ 18.17 H	R= 10.5 R_E	17 - 1976/150/ 23.93 H	R= 1.8 R_E
4 - 1976/150/ 7.33 H	R= 18.5 R_E	11 - 1976/150/ 19.17 H	R= 9.3 R_E	18 - 1976/151/ 0.22 H	R= 2.5 R_E
5 - 1976/150/ 7.83 H	R= 18.3 R_E	12 - 1976/150/ 22.33 H	R= 4.1 R_E	19 - 1976/151/ 1.08 H	R= 4.1 R_E
6 - 1976/150/ 8.33 H	R= 18.0 R_E	13 - 1976/150/ 23.28 H	R= 2.2 R_E	20 - 1976/151/ 4.00 H	R= 9.0 R_E
7 - 1976/150/ 9.83 H	R= 17.3 R_E	14 - 1976/150/ 23.59 H	R= 1.8 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/149 /13.00H TO1976/151 /14.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/151/ 14.00H	LAT= 75.6	11 - 1976/152/ 16.67H	LAT= 66.3
2 - 1976/151/ 20.00H	LAT= 80.9	12 - 1976/152/ 20.67H	LAT= 56.4
3 - 1976/151/ 21.50H	LAT= 81.5	13 - 1976/152/ 23.67H	LAT= 41.1
4 - 1976/151/ 23.00H	LAT= 81.8	14 - 1976/153/ 1.83H	LAT= 5.3
5 - 1976/152/ 0.50H	LAT= 81.8	15 - 1976/153/ 3.00H	LAT= -13.0
6 - 1976/152/ 2.00H	LAT= 81.6	16 - 1976/153/ 3.38H	LAT= -27.0
7 - 1976/152/ 3.50H	LAT= 80.4	17 - 1976/153/ 5.17H	LAT= 39.2
8 - 1976/152/ 5.50H	LAT= 79.7	18 - 1976/153/ 7.50H	LAT= 52.9
9 - 1976/152/ 8.50H	LAT= 77.2	19 - 1976/153/ 10.67H	LAT= 64.1
10 - 1976/152/ 12.00H	LAT= 73.9	20 - 1976/153/ 15.00H	LAT= 72.5

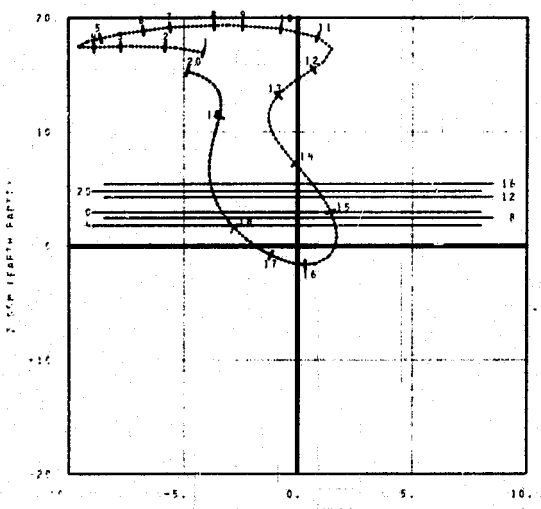
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/151/14.00H TO 1976/153/15.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/151/ 14.00H	R= 17.5RE	11 - 1976/152/ 9.50H	R= 18.9RE
2 - 1976/151/ 16.00H	R= 18.4RE	12 - 1976/152/ 14.50H	R= 16.5RE
3 - 1976/151/ 18.00H	R= 19.1RE	13 - 1976/152/ 17.33H	R= 14.5RE
4 - 1976/151/ 19.50H	R= 19.6RE	14 - 1976/152/ 22.50H	R= 9.1RE
5 - 1976/152/ 0.50H	R= 20.3RE	15 - 1976/153/ 0.92H	R= 5.3RE
6 - 1976/152/ 2.50H	R= 20.2RE	16 - 1976/153/ 3.00H	R= 1.7RE
7 - 1976/152/ 3.50H	R= 20.2RE	17 - 1976/153/ 3.58H	R= 2.6RE
8 - 1976/152/ 5.00H	R= 20.0RE	18 - 1976/153/ 4.58H	R= 4.7RE
9 - 1976/152/ 6.00H	R= 19.8RE	19 - 1976/153/ 10.17H	R=-12.4RE
10 - 1976/152/ 7.50H	R= 19.5RE	20 - 1976/153/ 15.00H	R= 16.3RE

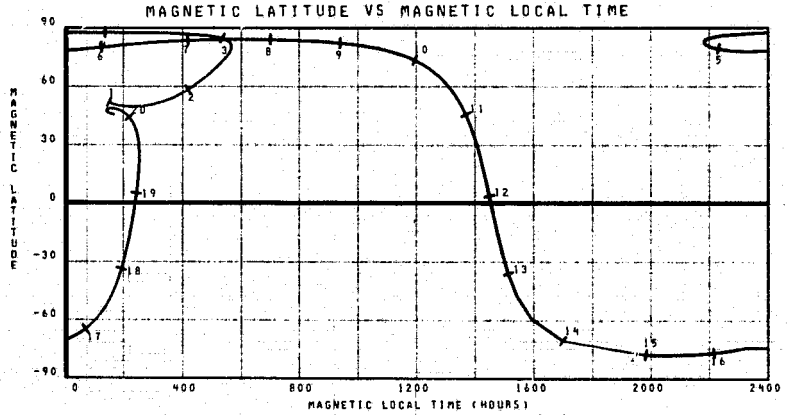
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/151/14.00H TO 1976/153/15.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

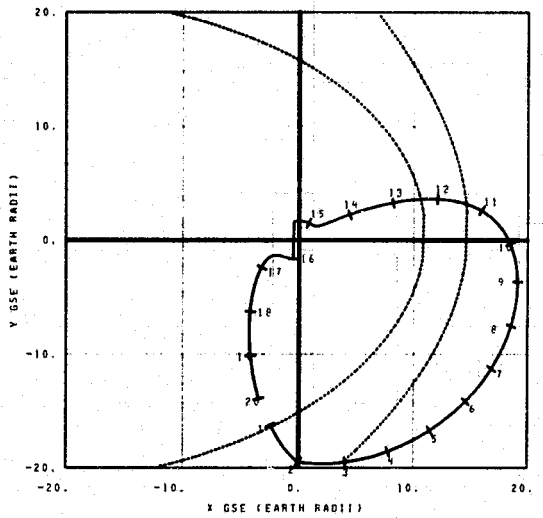
1 - 1976/151/ 14.00H	R= 17.5RE	8 - 1976/152/ 20.17H	R= 11.9RE	15 - 1976/153/ 3.00H	R= 1.7RE
2 - 1976/151/ 23.00H	R= 20.2RE	9 - 1976/152/ 21.00H	R= 11.0RE	16 - 1976/153/ 3.85H	R= 1.7RE
3 - 1976/152/ 6.50H	R= 19.7RE	10 - 1976/152/ 22.67H	R= 8.9RE	17 - 1976/153/ 5.17H	R= 1.9RE
4 - 1976/152/ 8.00H	R= 19.3RE	11 - 1976/153/ 1.08H	R= 5.0RE	18 - 1976/153/ 7.58H	R= 2.4RE
5 - 1976/152/ 12.50H	R= 17.6RE	12 - 1976/153/ 2.25H	R= 2.6RE	19 - 1976/153/ 9.33H	R= 4.2RE
6 - 1976/152/ 17.17H	R= 14.6RE	13 - 1976/153/ 2.67H	R= 1.9RE	20 - 1976/153/ 7.92H	R= 9.9RE
7 - 1976/152/ 19.17H	R= 12.9RE	14 - 1976/153/ 2.92H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/151 /14.00H TO1976/153 /15.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/153/ 15.17 H	LAT=	72.8	11 - 1976/154/ 18.33 H	LAT=	69.1
2 - 1976/153/ 22.33 H	LAT=	80.3	12 - 1976/154/ 22.67 H	LAT=	60.1
3 - 1976/154/ 0.33 H	LAT=	81.4	13 - 1976/155/ 1.92 H	LAT=	47.6
4 - 1976/154/ 1.83 H	LAT=	81.8	14 - 1976/155/ 4.33 H	LAT=	23.9
5 - 1976/154/ 3.33 H	LAT=	81.9	15 - 1976/155/ 6.03 H	LAT=	-74.9
6 - 1976/154/ 4.83 H	LAT=	81.6	16 - 1976/155/ 6.22 H	LAT=	-72.7
7 - 1976/154/ 6.33 H	LAT=	81.1	17 - 1976/155/ 7.45 H	LAT=	14.4
8 - 1976/154/ 8.33 H	LAT=	80.0	18 - 1976/155/ 9.42 H	LAT=	49.7
9 - 1976/154/ 10.83 H	LAT=	78.0	19 - 1976/155/ 12.00 H	LAT=	58.3
10 - 1976/154/ 13.83 H	LAT=	75.1	20 - 1976/155/ 15.50 H	LAT=	67.7

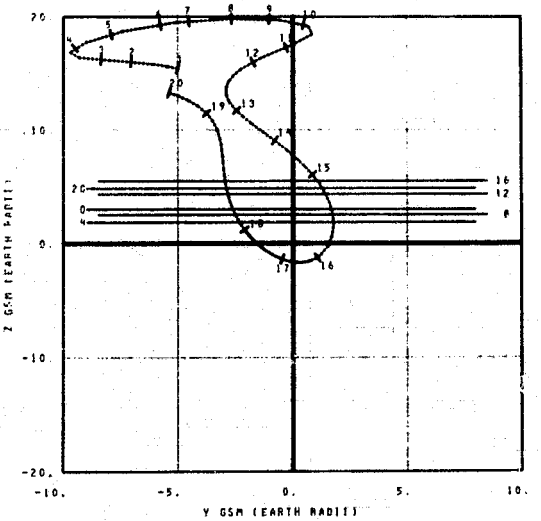
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/153/15.00H TO 1976/155/16.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/153/ 15.17 H	R= 16.4 R_E	11 - 1976/154/ 18.33 H	R= 18.0 R_E
2 - 1976/153/ 17.33 H	R= 17.6 R_E	12 - 1976/154/ 16.83 H	R= 17.0 R_E
3 - 1976/153/ 18.83 H	R= 18.3 R_E	13 - 1976/154/ 21.83 H	R= 13.4 R_E
4 - 1976/153/ 23.33 H	R= 19.7 R_E	14 - 1976/155/ 0.33 H	R= 10.8 R_E
5 - 1976/154/ 1.83 H	R= 20.1 R_E	15 - 1976/155/ 2.92 H	R= 8.1 R_E
6 - 1976/154/ 3.83 H	R= 20.3 R_E	16 - 1976/155/ 5.75 H	R= 2.1 R_E
7 - 1976/154/ 4.83 H	R= 20.3 R_E	17 - 1976/155/ 6.93 H	R= 1.9 R_E
8 - 1976/154/ 6.33 H	R= 20.2 R_E	18 - 1976/155/ 7.98 H	R= 4.1 R_E
9 - 1976/154/ 7.83 H	R= 20.0 R_E	19 - 1976/155/ 13.67 H	R= 12.7 R_E
10 - 1976/154/ 9.83 H	R= 19.7 R_E	20 - 1976/155/ 16.00 H	R= 19.7 R_E

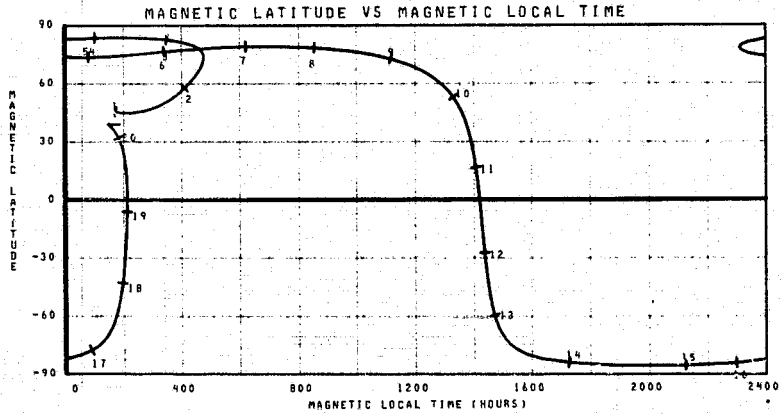
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/153/15.00H TO 1976/155/16.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

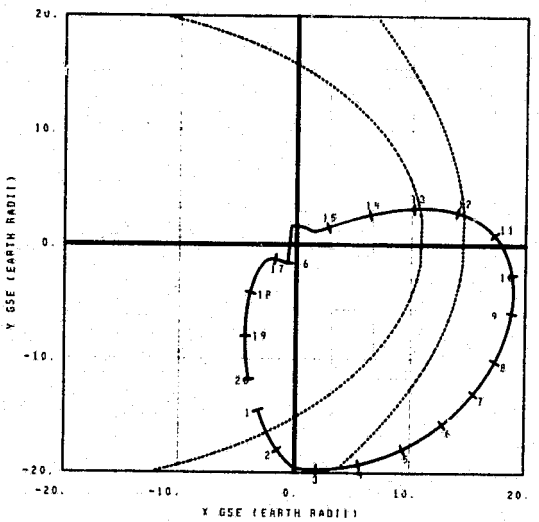
1 - 1976/153/ 15.17 H	R= 16.4 R_E	8 - 1976/154/ 22.67 H	R= 12.6 R_E	15 - 1976/155/ 4.20 H	R= 1.7 R_E
2 - 1976/153/ 23.83 H	R= 19.8 R_E	9 - 1976/155/ 0.50 H	R= 10.7 R_E	16 - 1976/155/ 4.22 H	R= 1.7 R_E
3 - 1976/154/ 6.83 H	R= 20.2 R_E	10 - 1976/155/ 3.25 H	R= 6.9 R_E	17 - 1976/155/ 4.27 H	R= 1.7 R_E
4 - 1976/154/ 8.33 H	R= 20.0 R_E	11 - 1976/155/ 5.08 H	R= 3.4 R_E	18 - 1976/155/ 6.55 H	R= 2.1 R_E
5 - 1976/154/ 15.83 H	R= 17.5 R_E	12 - 1976/155/ 5.75 H	R= 2.1 R_E	19 - 1976/155/ 7.12 H	R= 3.3 R_E
6 - 1976/154/ 19.17 H	R= 15.5 R_E	13 - 1976/155/ 6.00 H	R= 1.7 R_E	20 - 1976/155/ 9.50 H	R= 7.6 R_E
7 - 1976/154/ 21.33 H	R= 13.8 R_E	14 - 1976/155/ 6.17 H	R= 1.7 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/153 /15.00H TO1976/155 /16.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/155/ 16.17H	LAT= 69.0	11 - 1976/156/ 19.50H	LAT= 72.1
2 - 1976/155/ 21.50H	LAT= 76.7	12 - 1976/156/ 24.00H	LAT= 69.7
3 - 1976/156/ 3.00H	LAT= 81.1	13 - 1976/157/ 3.67H	LAT= 59.5
4 - 1976/156/ 4.50H	LAT= 81.6	14 - 1976/157/ 6.92H	LAT= 38.6
5 - 1976/156/ 6.00H	LAT= 81.9	15 - 1976/157/ 8.92H	LAT= -0.5
6 - 1976/156/ 7.50H	LAT= 81.8	16 - 1976/157/ 9.50H	LAT= -63.5
7 - 1976/156/ 9.00H	LAT= 81.4	17 - 1976/157/ 9.83H	LAT= -25.2
8 - 1976/156/ 10.50H	LAT= 80.7	18 - 1976/157/ 11.50H	LAT= 39.0
9 - 1976/156/ 13.00H	LAT= 79.0	19 - 1976/157/ 13.75H	LAT= 51.9
10 - 1976/156/ 15.50H	LAT= 76.8	20 - 1976/157/ 16.67H	LAT= 62.9

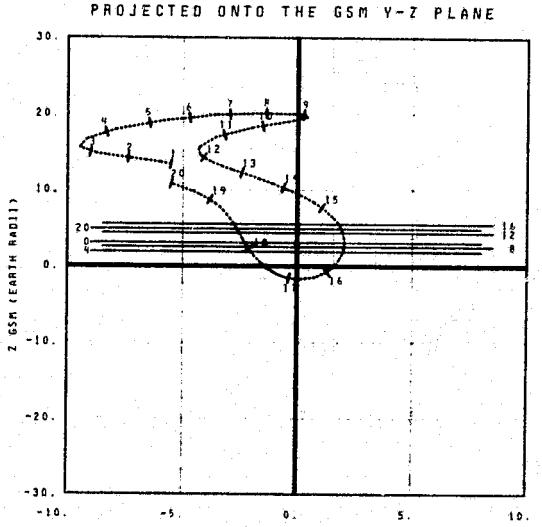
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/155/16.00H TO 1976/157/17.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/155/ 16.17H	R= 19.8RE	11 - 1976/156/ 17.50H	R= 18.3RE
2 - 1976/155/ 18.17H	R= 16.2RE	12 - 1976/156/ 21.83H	R= 15.9RE
3 - 1976/155/ 20.50H	R= 17.6RE	13 - 1976/157/ 0.50H	R= 13.9RE
4 - 1976/156/ 1.50H	R= 19.5RE	14 - 1976/157/ 2.50H	R= 12.0RE
5 - 1976/156/ 3.50H	R= 19.9RE	15 - 1976/157/ 4.50H	R= 9.7RE
6 - 1976/156/ 5.00H	R= 20.1RE	16 - 1976/157/ 8.67H	R= 2.6RE
7 - 1976/156/ 6.50H	R= 20.2RE	17 - 1976/157/ 9.53H	R= 1.8RE
8 - 1976/156/ 8.00H	R= 20.3RE	18 - 1976/157/ 11.08H	R= 4.0RE
9 - 1976/156/ 10.50H	R= 20.1RE	19 - 1976/157/ 14.33H	R= 10.5RE
10 - 1976/156/ 15.50H	R= 19.0RE	20 - 1976/157/ 17.00H	R= 12.8RE

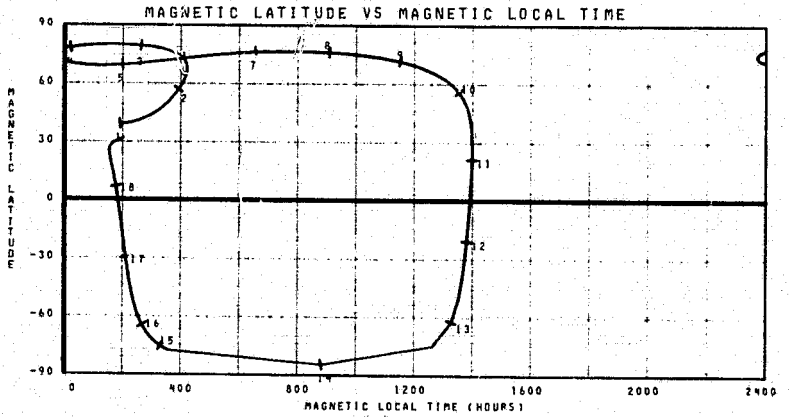
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/155/16.00H TO 1976/157/17.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

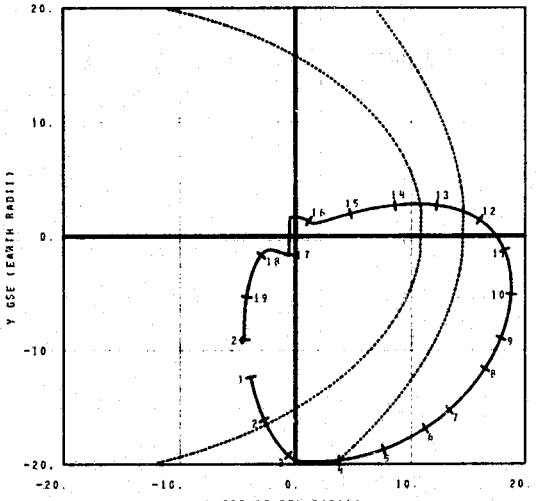
1 - 1976/155/ 16.17H	R= 19.8RE	8 - 1976/157/ 0.67H	R= 13.7RE	15 - 1976/157/ 9.92H	R= 1.8RE
2 - 1976/156/ 0.50H	R= 17.2RE	9 - 1976/157/ 2.67H	R= 11.8RE	16 - 1976/157/ 9.68H	R= 1.9RE
3 - 1976/156/ 7.00H	R= 20.3RE	10 - 1976/157/ 5.75H	R= 8.0RE	17 - 1976/157/ 9.97H	R= 2.5RE
4 - 1976/156/ 9.50H	R= 20.2RE	11 - 1976/157/ 8.17H	R= 3.7RE	18 - 1976/157/ 11.08H	R= 4.7RE
5 - 1976/156/ 17.50H	R= 18.3RE	12 - 1976/157/ 8.92H	R= 2.1RE		
6 - 1976/156/ 20.50H	R= 16.7RE	13 - 1976/157/ 9.25H	R= 1.7RE		
7 - 1976/156/ 22.83H	R= 19.2RE	14 - 1976/157/ 9.42H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/155 /16.00H TO1976/157 /17.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/157/ 17.17H	LAT=	64.2	11 - 1976/158/ 20.83H	LAT=	79.5
2 - 1976/157/ 21.50H	LAT=	72.6	12 - 1976/159/ 0.83H	LAT=	69.1
3 - 1976/158/ 3.83H	LAT=	79.6	13 - 1976/159/ 5.17H	LAT=	60.1
4 - 1976/158/ 7.33H	LAT=	81.5	14 - 1976/159/ 8.25H	LAT=	48.4
5 - 1976/158/ 8.83H	LAT=	81.8	15 - 1976/159/ 10.67H	LAT=	25.9
6 - 1976/158/ 10.33H	LAT=	81.8	16 - 1976/159/ 12.43H	LAT=	-69.8
7 - 1976/158/ 11.33H	LAT=	81.6	17 - 1976/159/ 12.67H	LAT=	-70.5
8 - 1976/158/ 13.33H	LAT=	80.9	18 - 1976/159/ 13.63H	LAT=	8.4
9 - 1976/158/ 15.83H	LAT=	80.0	19 - 1976/159/ 15.42H	LAT=	41.0
10 - 1976/158/ 17.33H	LAT=	78.1	20 - 1976/159/ 17.75H	LAT=	55.6

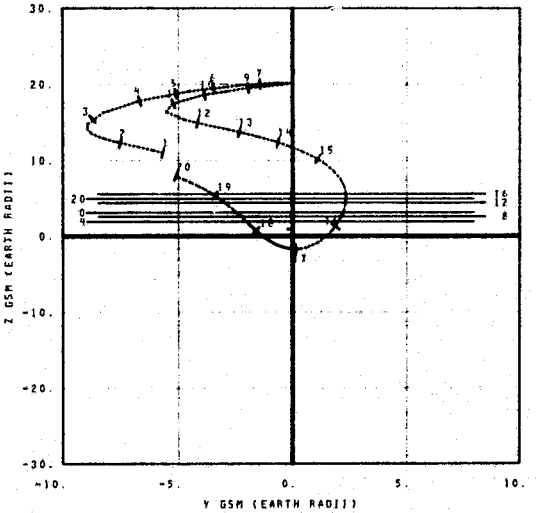
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/157/17.00H TO 1976/159/18.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/157/ 17.17H	R= 13.0RE	11 - 1976/158/ 19.33H	R= 18.8RE
2 - 1976/157/ 19.33H	R= 14.8RE	12 - 1976/159/ 0.17H	R= 16.5RE
3 - 1976/158/ 0.33H	R= 17.9RE	13 - 1976/159/ 2.17H	R= 15.1RE
4 - 1976/158/ 3.33H	R= 19.1RE	14 - 1976/159/ 3.83H	R= 13.0RE
5 - 1976/158/ 4.83H	R= 19.5RE	15 - 1976/159/ 5.83H	R= 11.9RE
6 - 1976/158/ 6.33H	R= 19.8RE	16 - 1976/159/ 11.00H	R= 9.5RE
7 - 1976/158/ 8.33H	R= 20.1RE	17 - 1976/159/ 12.92H	R= 1.7RE
8 - 1976/158/ 11.33H	R= 20.3RE	18 - 1976/159/ 13.68H	R= 3.4RE
9 - 1976/158/ 15.33H	R= 19.9RE	19 - 1976/159/ 16.90H	R= 7.7RE
10 - 1976/158/ 17.33H	R= 19.4RE	20 - 1976/159/ 18.00H	R= 10.4RE

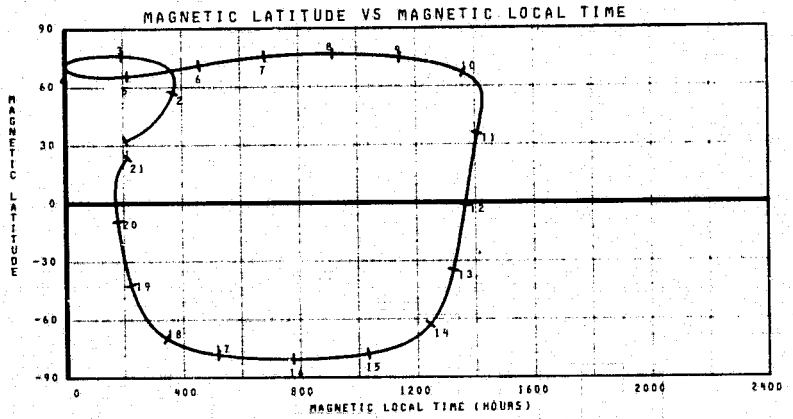
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/157/17.00H TO 1976/159/18.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

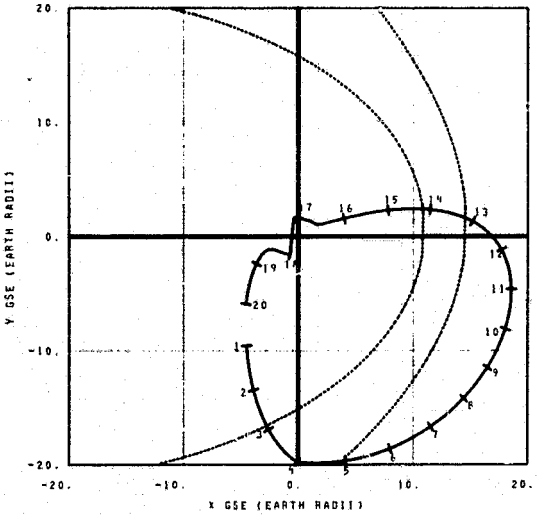
1 - 1976/157/ 17.17H	R= 13.0RE	8 - 1976/159/ 2.17H	R= 15.1RE	15 - 1976/159/ 12.65H	R= 1.7RE
2 - 1976/158/ 3.33H	R= 18.3RE	9 - 1976/159/ 4.00H	R= 13.6RE	16 - 1976/159/ 12.76H	R= 1.7RE
3 - 1976/158/ 7.33H	R= 20.0RE	10 - 1976/159/ 6.03H	R= 10.8RE	17 - 1976/159/ 12.75H	R= 1.8RE
4 - 1976/158/ 11.83H	R= 20.3RE	11 - 1976/159/ 11.00H	R= 9.3RE	18 - 1976/159/ 12.83H	R= 1.9RE
5 - 1976/158/ 17.83H	R= 19.3RE	12 - 1976/159/ 12.00H	R= 8.4RE	19 - 1976/159/ 13.13H	R= 2.4RE
6 - 1976/158/ 21.83H	R= 17.7RE	13 - 1976/159/ 12.33H	R= 1.8RE	20 - 1976/159/ 13.90H	R= 4.8RE
7 - 1976/159/ 2.33H	R= 16.4RE	14 - 1976/159/ 12.53H	R= 1.7RE	21 - 1976/159/ 18.00H	R= 10.4RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/157/17.00H TO1976/159/18.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/159/ 18.08H	LAT= 56.9	11 - 1976/160/ 21.50H	LAT= 77.2
2 - 1976/159/ 21.50H	LAT= 66.8	12 - 1976/161/ 1.00H	LAT= 73.4
3 - 1976/160/ 2.00H	LAT= 79.3	13 - 1976/161/ 5.17H	LAT= 67.2
4 - 1976/160/ 9.00H	LAT= 80.8	14 - 1976/161/ 9.17H	LAT= 57.8
5 1976/160/ 11.00H	LAT= 81.6	15 - 1976/161/ 12.00H	LAT= 49.7
6 - 1976/160/ 12.50H	LAT= 81.9	16 - 1976/161/ 19.33H	LAT= 16.6
7 - 1976/160/ 14.00H	LAT= 81.8	17 - 1976/161/ 15.75H	LAT= -81.9
8 - 1976/160/ 15.50H	LAT= 81.4	18 - 1976/161/ 15.92H	LAT= -65.7
9 - 1976/160/ 17.00H	LAT= 80.7	19 - 1976/161/ 17.25H	LAT= 20.3
10 - 1976/160/ 19.00H	LAT= 79.4	20 - 1976/161/ 19.00H	LAT= 44.1

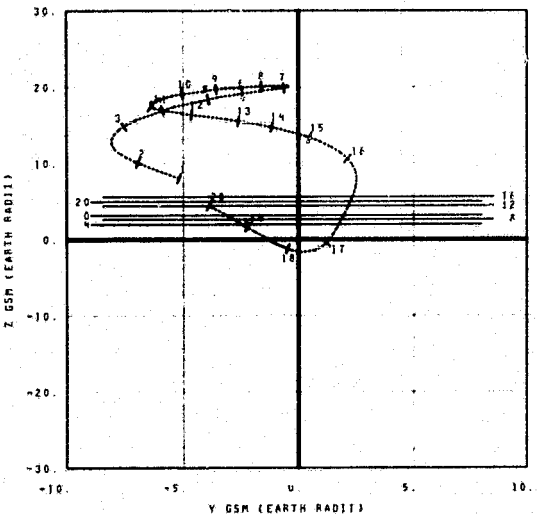
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/159/18.00H TO 1976/161/19.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/159/ 18.08H	R= 10.5RE	11 - 1976/160/ 22.00H	R= 19.0RE
2 - 1976/159/ 20.33H	R= 12.9RE	12 - 1976/161/ 1.00H	R= 17.8RE
3 - 1976/160/ 1.67H	R= 14.9RE	13 - 1976/161/ 3.00H	R= 16.7RE
4 - 1976/160/ 4.00H	R= 18.1RE	14 - 1976/161/ 9.33H	R= 19.9RE
5 - 1976/160/ 6.00H	R= 19.9RE	15 - 1976/161/ 6.00H	R= 19.6RE
6 - 1976/160/ 7.50H	R= 19.3RE	16 - 1976/161/ 8.50H	R= 12.9RE
7 - 1976/160/ 10.00H	R= 19.9RE	17 - 1976/161/ 15.00H	R= 2.8RE
8 - 1976/160/ 14.50H	R= 20.3RE	18 - 1976/161/ 16.17H	R= 2.1RE
9 - 1976/160/ 16.50H	R= 20.2RE	19 - 1976/161/ 17.42H	R= 4.6RE
10 - 1976/160/ 18.00H	R= 20.0RE	20 - 1976/161/ 19.00H	R= 7.4RE

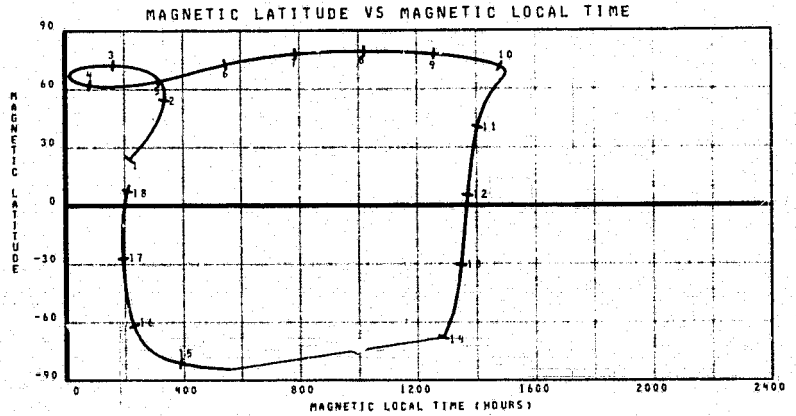
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/159/18.00H TO 1976/161/19.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

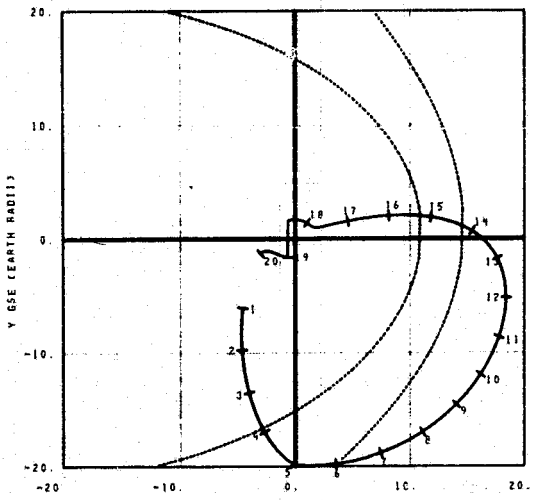
1 - 1976/159/ 18.08H	R= 10.5RE	8 - 1976/161/ 9.17H	R= 16.0RE	15 - 1976/161/ 16.03H	R= 1.7RE
2 - 1976/160/ 1.67H	R= 16.9RE	9 - 1976/161/ 6.00H	R= 19.6RE	16 - 1976/161/ 16.22H	R= 2.1RE
3 - 1976/160/ 7.50H	R= 19.3RE	10 - 1976/161/ 9.50H	R= 11.9RE	17 - 1976/161/ 16.70H	R= 3.1RE
4 - 1976/160/ 10.08H	R= 20.3RE	11 - 1976/161/ 10.50H	R= 3.9RE	18 - 1976/161/ 18.07H	R= 6.1RE
5 - 1976/160/ 20.00H	R= 17.6RE	12 - 1976/161/ 15.25H	R= 2.3RE		
6 - 1976/160/ 23.00H	R= 10.2RE	13 - 1976/161/ 15.53H	R= 1.8RE		
7 - 1976/161/ 2.50H	R= 17.0RE	14 - 1976/161/ 15.83H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/159 /18.00H TO19T6/161 /19.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/161/ 19.08 H	LAT= 49.8	11 - 1976/162/ 22.33 H	LAT= 79.3
2 - 1976/161/ 21.58 H	LAT= 57.6	12 - 1976/163/ 0.83 H	LAT= 77.2
3 - 1976/162/ 0.83 H	LAT= 67.0	13 - 1976/163# 9.33 H	LAT= 73.3
4 - 1976/162/ 5.33 H	LAT= 74.9	14 - 1976/163/ 8.17 H	LAT= 67.6
5 - 1976/162/ 12.33 H	LAT= 80.9	15 - 1976/163/ 12.17 H	LAT= 58.5
6 - 1976/162/ 14.33 H	LAT= 81.7	16 - 1976/163/ 15.08 H	LAT= 46.0
7 - 1976/162/ 15.83 H	LAT= 81.9	17 - 1976/163/ 17.25 H	LAT= 23.0
8 - 1976/162/ 17.33 H	LAT= 81.8	18 - 1976/163/ 18.90 H	LAT= -75.1
9 - 1976/162/ 18.83 H	LAT= 81.9	19 - 1976/163/ 19.12 H	LAT= -67.5
10 - 1976/162/ 20.33 H	LAT= 80.6	20 - 1976/163/ 19.95 H	LAT= 3.7

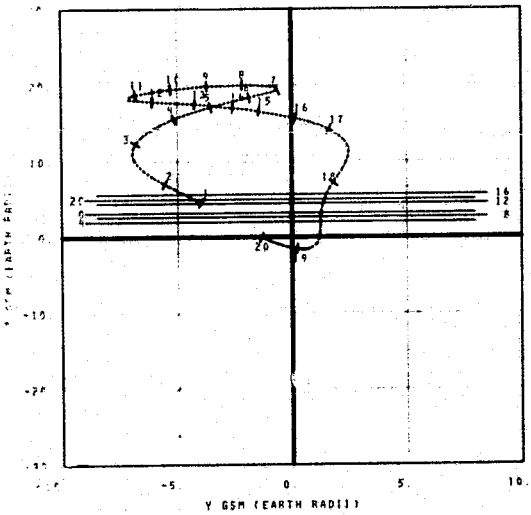
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/161/19.08H TO 1976/163/20.08H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/161/ 19.08 H	R= 7.9 R_E	11 - 1976/162/ 19.83 H	R= 20.1 R_E
2 - 1976/161/ 20.92 H	R= 10.1 R_E	12 - 1976/163/ 0.33 H	R= 19.3 R_E
3 - 1976/162/ 1.50 H	R= 14.6 R_E	13 - 1976/163/ 2.33 H	R= 18.6 R_E
4 - 1976/162/ 4.50 H	R= 16.7 R_E	14 - 1976/163/ 3.83 H	R= 17.9 R_E
5 - 1976/162/ 6.33 H	R= 17.7 R_E	15 - 1976/163/ 4.83 H	R= 17.5 R_E
6 - 1976/162/ 8.33 H	R= 18.5 R_E	16 - 1976/163/ 6.33 H	R= 16.6 R_E
7 - 1976/162/ 10.83 H	R= 19.4 R_E	17 - 1976/163/ 8.17 H	R= 15.9 R_E
8 - 1976/162/ 14.83 H	R= 20.1 R_E	18 - 1976/163/ 14.33 H	R= 9.5 R_E
9 - 1976/162/ 16.33 H	R= 20.2 R_E	19 - 1976/163/ 19.17 H	R= 1.0 R_E
10 - 1976/162/ 17.83 H	R= 20.3 R_E	20 - 1976/163/ 19.98 H	R= 3.3 R_E

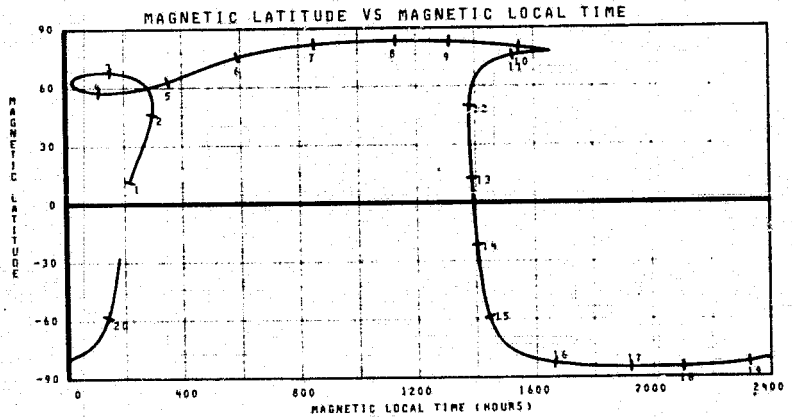
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/161/19.08H TO 1976/163/20.08H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

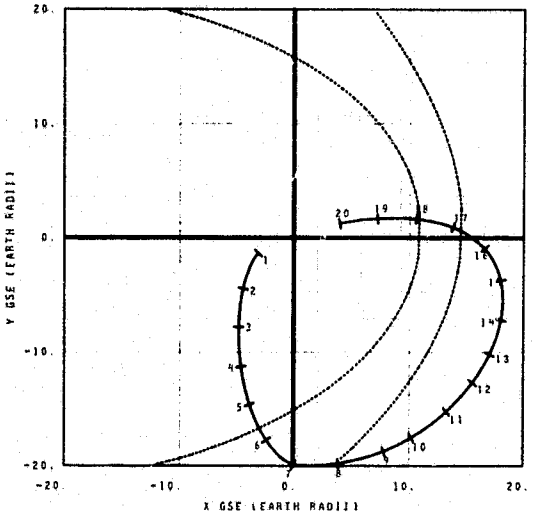
1 - 1976/161/ 19.08 H R= 7.5 R_E	8 - 1976/163/ 5.83 H R= 16.9 R_E	15 - 1976/163/ 19.17 H R= 1.0 R_E
2 - 1976/162/ 1.08 H R= 14.2 R_E	9 - 1976/163/ 6.83 H R= 16.3 R_E	16 - 1976/163/ 19.20 H R= 1.0 R_E
3 - 1976/162/ 7.33 H R= 18.1 R_E	10 - 1976/163/ 9.08 H R= 14.8 R_E	17 - 1976/163/ 19.22 H R= 1.0 R_E
4 - 1976/162/ 15.83 H R= 20.2 R_E	11 - 1976/163/ 15.08 H R= 2.9 R_E	18 - 1976/163/ 19.23 H R= 1.0 R_E
5 - 1976/162/ 21.33 H R= 19.9 R_E	12 - 1976/163/ 17.58 H R= 4.2 R_E	19 - 1976/163/ 19.25 H R= 1.9 R_E
6 - 1972/163/ 1.83 H R= 18.8 R_E	13 - 1976/163/ 18.42 H R= 2.4 R_E	20 - 1976/163/ 19.98 H R= 2.3 R_E
7 - 1976/163/ 4.33 H R= 17.7 R_E	14 - 1976/163/ 18.79 H R= 1.9 R_E	

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/161/19.08H TO1976/163/20.08H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/163/ 20.00H	LAT= 5.7	11 - 1976/164/ 22.00H	LAT= 81.9
2 - 1976/163/ 21.50H	LAT= 37.1	12 - 1976/164/ 23.50H	LAT= 80.7
3 - 1976/163/ 23.42H	LAT= 51.8	13 - 1976/165/ 1.00H	LAT= 79.8
4 - 1976/164/ 2.00H	LAT= 61.8	14 - 1976/165/ 3.00H	LAT= 78.2
5 - 1976/164/ 5.33H	LAT= 69.9	15 - 1976/165/ 6.00H	LAT= 75.2
6 - 1976/164/ 10.00H	LAT= 76.1	16 - 1976/165/ 9.50H	LAT= 70.7
7 - 1976/164/ 16.50H	LAT= 81.3	17 - 1976/165/ 13.33H	LAT= 63.8
8 - 1976/164/ 18.00H	LAT= 81.8	18 - 1976/165/ 16.50H	LAT= 54.7
9 - 1976/164/ 19.50H	LAT= 81.9	19 - 1976/165/ 19.00H	LAT= 41.0
10 - 1976/164/ 20.50H	LAT= 81.8	20 - 1976/165/ 20.83H	LAT= 19.4

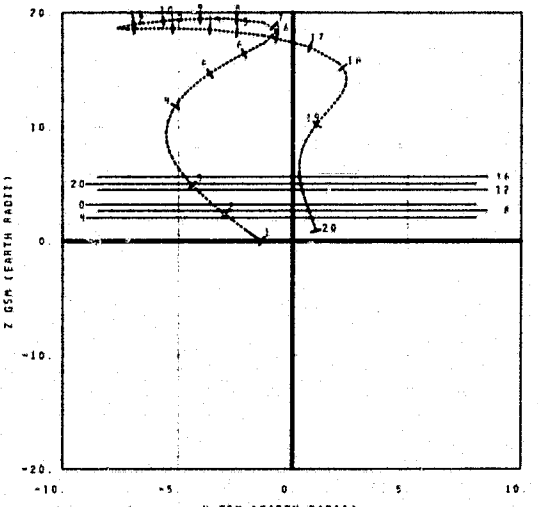
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/163/20.00H TO 1976/165/21.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/163/ 20.00H	R= 3.3RE	11 - 1976/164/ 19.50H	R= 20.2RE
2 - 1976/163/ 21.17H	R= 5.7RE	12 - 1976/164/ 24.00H	R= 20.0RE
3 - 1976/163/ 22.67H	R= 8.1RE	13 - 1976/165/ 2.00H	R= 19.7RE
4 - 1976/164/ 3.50H	R= 13.6RE	14 - 1976/165/ 3.50H	R= 19.3RE
5 - 1976/164/ 6.00H	R= 15.6RE	15 - 1976/165/ 9.50H	R= 19.6RE
6 - 1976/164/ 8.00H	R= 16.8RE	16 - 1976/165/ 6.00H	R= 18.4RE
7 - 1976/164/ 12.50H	R= 18.9RE	17 - 1976/165/ 7.50H	R= 17.7RE
8 - 1976/164/ 15.00H	R= 19.6RE	18 - 1976/165/ 10.00H	R= 16.3RE
9 - 1976/164/ 16.50H	R= 19.9RE	19 - 1976/165/ 15.33H	R= 12.0RE
10 - 1976/164/ 18.00H	R= 20.1RE	20 - 1976/165/ 21.00H	R= 3.7RE

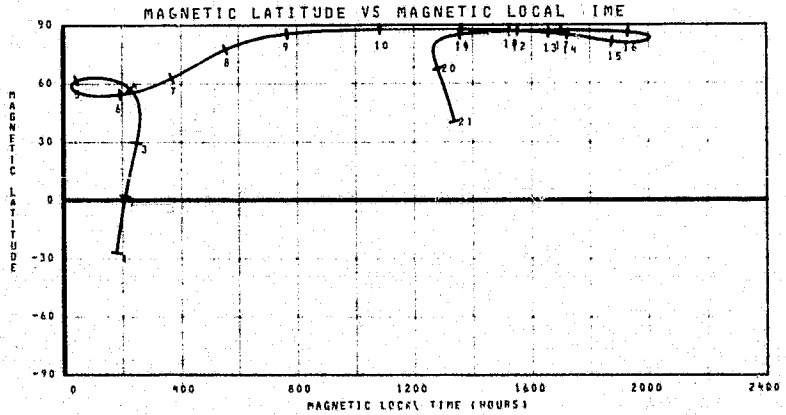
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/163/20.00H TO 1976/165/21.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

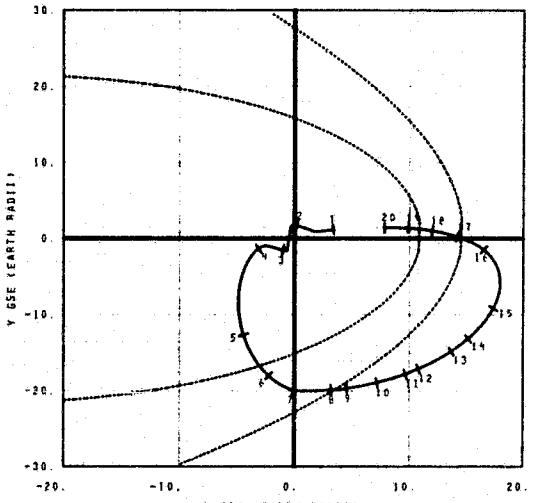
1 - 1976/163/ 20.00H	R= 3.3RE	8 - 1976/165/ 3.00H	R= 19.9RE	15 - 1976/165/ 10.83H	R= 15.8RE
2 - 1976/163/ 21.17H	R= 5.7RE	9 - 1976/165/ 5.50H	R= 18.6RE	16 - 1976/165/ 16.00H	R= 11.3RE
3 - 1976/163/ 23.03H	R= 9.7RE	10 - 1976/165/ 6.50H	R= 18.2RE	17 - 1976/165/ 16.67H	R= 10.5RE
4 - 1976/164/ 4.83H	R= 14.7RE	11 - 1976/165/ 7.00H	R= 18.0RE	18 - 1976/165/ 17.00H	R= 10.1RE
5 - 1976/164/ 10.00H	R= 17.9RE	12 - 1976/165/ 7.50H	R= 17.7RE	19 - 1976/165/ 17.50H	R= 9.5RE
6 - 1976/164/ 18.00H	R= 20.1RE	13 - 1976/165/ 8.00H	R= 17.5RE	20 - 1976/165/ 19.67H	R= 6.3RE
7 - 1976/164/ 22.50H	R= 20.2RE	14 - 1976/165/ 8.50H	R= 17.2RE	21 - 1976/165/ 21.00H	R= 3.7RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/163 /20.00H TO1976/165 /21.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/165/ 21.00H	LAT= 6.9	11 - 1976/166/ 23.03H	LAT= 81.8		
2 - 1976/165/ 22.17H	LAT= -81.1	12 - 1976/167/ 0.33H	LAT= 81.7		
3 - 1976/165/ 22.92H	LAT= -55.9	13 - 1976/167/ 1.83H	LAT= 81.2		
4 - 1976/165/ 23.25H	LAT= 7.1	14 - 1976/167/ 2.83H	LAT= 80.7		
5 - 1976/166/ 6.50H	LAT= 65.1	15 - 1976/167/ 5.33H	LAT= 79.0		
6 - 1976/165/ 13.83H	LAT= 76.8	16 - 1976/167/ 12.83H	LAT= 70.6		
7 - 1976/166/ 19.83H	LAT= 81.3	17 - 1976/167/ 16.17H	LAT= 64.7		
8 - 1976/166/ 21.33H	LAT= 81.8	18 - 1976/167/ 16.50H	LAT= 58.9		
9 - 1976/166/ 21.83H	LAT= 81.9	19 - 1976/167/ 20.33H	LAT= 52.3		
10 - 1976/166/ 22.83H	LAT= 81.9	20 - 1976/167/ 21.83H	LAT= 44.0		

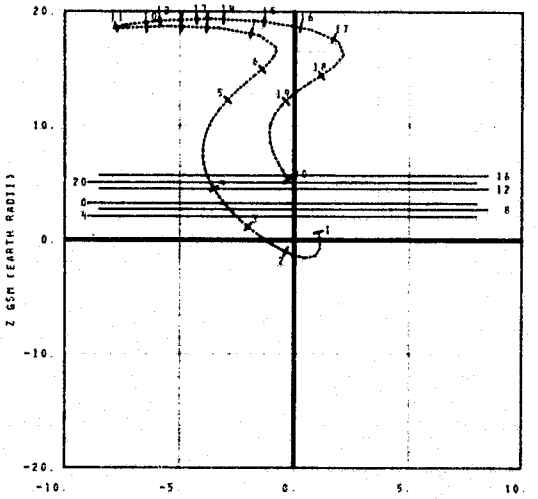
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/165/21.00H TO 1976/167/22.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/165/ 21.00H	R= 3.4R_E	11 - 1976/166/ 22.83H	R= 20.2R_E
2 - 1976/165/ 22.73H	R= 2.3R_E	12 - 1976/167/ 1.83H	R= 20.2R_E
3 - 1976/165/ 23.75H	R= 4.5R_E	13 - 1976/167/ 3.33H	R= 20.0R_E
4 - 1976/166/ 1.92H	R= 7.4R_E	14 - 1976/167/ 4.33H	R= 19.8R_E
5 - 1976/166/ 6.50H	R= 13.4R_E	15 - 1976/167/ 5.83H	R= 19.5R_E
6 - 1976/166/ 9.17H	R= 15.5R_E	16 - 1976/167/ 7.33H	R= 19.1R_E
7 - 1976/166/ 14.33H	R= 18.9R_E	17 - 1976/167/ 9.33H	R= 18.3R_E
8 - 1976/166/ 16.33H	R= 19.1R_E	18 - 1976/167/ 14.33H	R= 15.6R_E
9 - 1976/166/ 17.33H	R= 19.9R_E	19 - 1976/167/ 16.83H	R= 13.6R_E
10 - 1976/166/ 18.83H	R= 19.8R_E	20 - 1976/167/ 22.00H	R= 7.7R_E

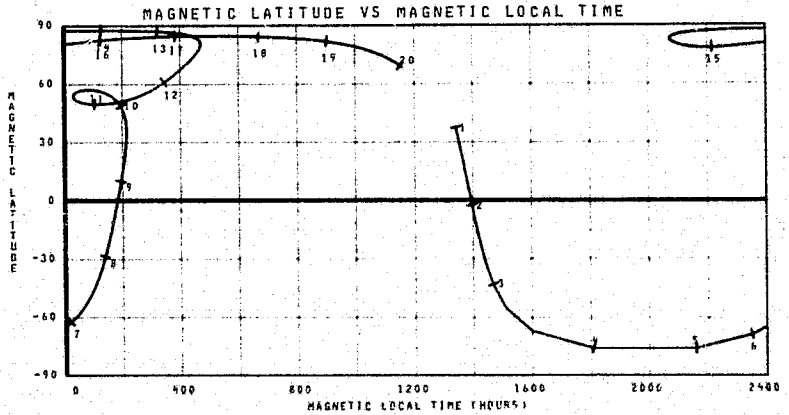
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/165/21.00H TO 1976/167/22.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

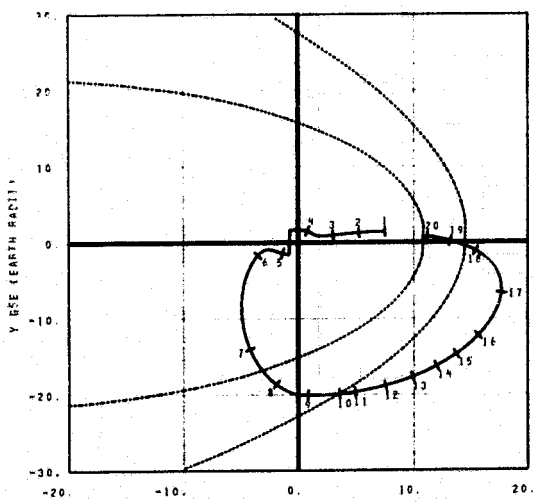
1 - 1976/165/ 21.00H	R= 3.4R_E	8 - 1976/165/ 23.02H	R= 2.9R_E	15 - 1976/167/ 13.67H	R= 16.1R_E
2 - 1976/165/ 21.75H	R= 2.2R_E	9 - 1976/166/ 0.33H	R= 5.6R_E	16 - 1976/167/ 17.17H	R= 13.3R_E
3 - 1976/165/ 22.08H	R= 1.7R_E	10 - 1976/166/ 4.67H	R= 11.6R_E	17 - 1976/167/ 18.33H	R= 12.2R_E
4 - 1976/165/ 22.33H	R= 1.7R_E	11 - 1976/166/ 15.83H	R= 18.9R_E	18 - 1976/167/ 19.17H	R= 11.3R_E
5 - 1976/165/ 22.92H	R= 1.8R_E	12 - 1976/166/ 22.83H	R= 20.2R_E	19 - 1976/167/ 20.00H	R= 10.4R_E
6 - 1976/165/ 22.50H	R= 1.9R_E	13 - 1976/167/ 4.33H	R= 19.4R_E	20 - 1976/167/ 21.92H	R= 7.4R_E
7 - 1976/165/ 22.57H	R= 2.0R_E	14 - 1976/167/ 6.83H	R= 19.2R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/165/21.00H TO1976/167/22.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/167/ 22.00 H	LAT=	42.1	11 - 1976/169/	1.50 H	LAT=	81.9
2 - 1976/167/ 23.92 H	LAT=	27.5	12 - 1976/169/	2.50 H	LAT=	81.9
3 - 1976/168/ 0.50 H	LAT=	-1.3	13 - 1976/169/	3.50 H	LAT=	81.7
4 - 1976/168/ 1.35 H	LAT=	-78.6	14 - 1976/169/	4.50 H	LAT=	81.9
5 - 1976/168/ 1.72 H	LAT=	-89.3	15 - 1976/169/	5.50 H	LAT=	81.0
6 - 1976/168/ 2.70 H	LAT=	15.0	16 - 1976/169/	7.00 H	LAT=	80.2
7 - 1976/168/ 11.17 H	LAT=	68.1	17 - 1976/169/	11.00 H	LAT=	76.9
8 - 1976/168/ 18.50 H	LAT=	78.2	18 - 1976/169/	17.67 H	LAT=	68.1
9 - 1976/168/ 24.00 H	LAT=	81.6	19 - 1976/169/	20.50 H	LAT=	62.3
10 - 1976/169/ 1.00 H	LAT=	81.9	20 - 1976/169/	22.50 H	LAT=	56.9

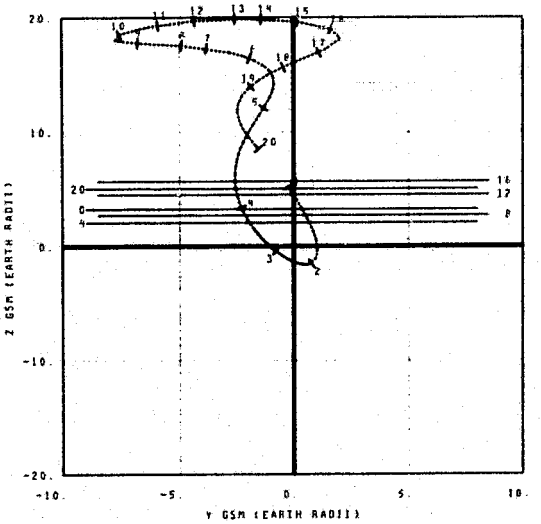
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/167/22.00H TO 1976/169/23.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/167/ 22.00 H	R=	7.4 R_E	11 - 1976/169/	2.00 H	R=	20.2 R_E
2 - 1976/168/ 1.25 H	R=	1.8 R_E	12 - 1976/169/	3.50 H	R=	20.3 R_E
3 - 1976/168/ 2.10 H	R=	2.8 R_E	13 - 1976/169/	5.00 H	R=	20.2 R_E
4 - 1976/168/ 5.83 H	R=	6.1 R_E	14 - 1976/169/	6.00 H	R=	20.1 R_E
5 - 1976/168/ 9.33 H	R=	13.1 R_E	15 - 1976/169/	7.50 H	R=	19.8 R_E
6 - 1976/168/ 14.50 H	R=	16.9 R_E	16 - 1976/169/	9.50 H	R=	19.4 R_E
7 - 1976/168/ 16.50 H	R=	17.9 R_E	17 - 1976/169/	14.00 H	R=	17.7 R_E
8 - 1976/168/ 17.50 H	R=	18.3 R_E	18 - 1976/169/	16.00 H	R=	16.6 R_E
9 - 1976/168/ 19.50 H	R=	19.1 R_E	19 - 1976/169/	18.00 H	R=	15.3 R_E
10 - 1976/168/ 23.50 H	R=	20.0 R_E	20 - 1976/169/	23.00 H	R=	10.6 R_E

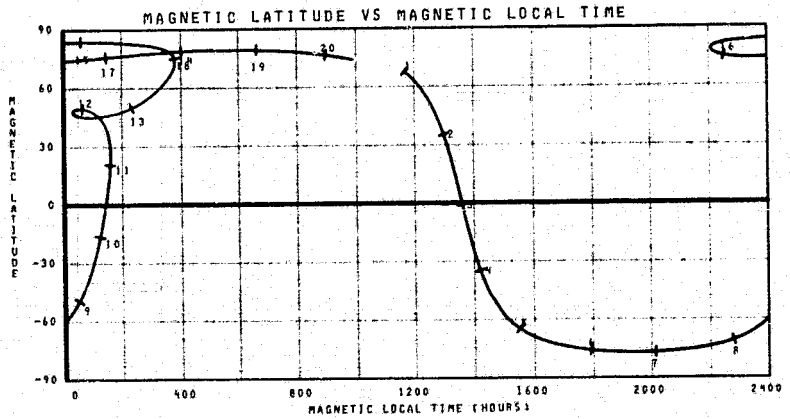
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/167/22.00H TO 1976/169/23.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

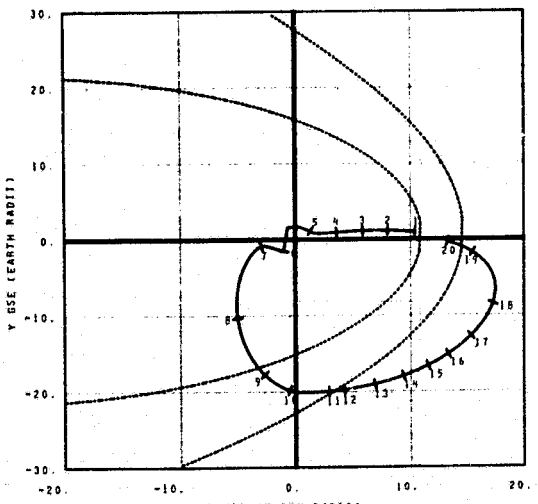
1 - 1976/167/ 22.08 H	R=	7.6 R_E	8 - 1976/168/	1.62 H	R=	1.8 R_E	15 - 1976/169/	7.00 H	R=	19.9 R_E
2 - 1976/168/ 0.08 H	R=	4.0 R_E	9 - 1976/168/	1.92 H	R=	2.1 R_E	16 - 1976/169/	12.50 H	R=	18.4 R_E
3 - 1976/168/ 0.83 H	R=	2.4 R_E	10 - 1976/168/	2.28 H	R=	3.1 R_E	17 - 1976/169/	17.33 H	R=	15.7 R_E
4 - 1976/168/ 1.17 H	R=	1.9 R_E	11 - 1976/168/	3.67 H	R=	5.8 R_E	18 - 1976/169/	19.50 H	R=	14.1 R_E
5 - 1976/168/ 1.38 H	R=	1.7 R_E	12 - 1976/168/	9.00 H	R=	12.7 R_E	19 - 1976/169/	21.00 H	R=	12.0 R_E
6 - 1976/168/ 1.48 H	R=	1.7 R_E	13 - 1976/168/	20.00 H	R=	19.2 R_E	20 - 1976/169/	22.33 H	R=	11.4 R_E
7 - 1976/168/ 1.53 H	R=	1.7 R_E	14 - 1976/169/	3.50 H	R=	20.3 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/167/22.00H TO1976/169/23.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/169/	23.17H	LAT= 53.9	11 - 1976/171/	9.33H	LAT=	81.9
2 - 1976/170/	0.92H	LAT= 44.9	12 - 1976/171/	9.83H	LAT=	81.9
3 - 1976/170/	2.25H	LAT= 32.9	13 - 1976/171/	5.83H	LAT=	81.9
4 - 1976/170/	3.42H	LAT= 10.0	14 - 1976/171/	6.83H	LAT=	81.7
5 - 1976/170/	4.50H	LAT= -70.9	15 - 1976/171/	7.83H	LAT=	81.4
6 - 1976/170/	4.83H	LAT= -56.0	16 - 1976/171/	8.83H	LAT=	81.0
7 - 1976/170/	5.52H	LAT= 0.5	17 - 1976/171/	10.33H	LAT=	80.1
8 - 1976/170/	11.00H	LAT= 59.6	18 - 1976/171/	13.33H	LAT=	77.7
9 - 1976/170/	19.83H	LAT= 76.2	19 - 1976/171/	20.83H	LAT=	68.2
10 - 1976/171/	1.83H	LAT= 81.1	20 - 1976/171/	23.67H	LAT=	62.4

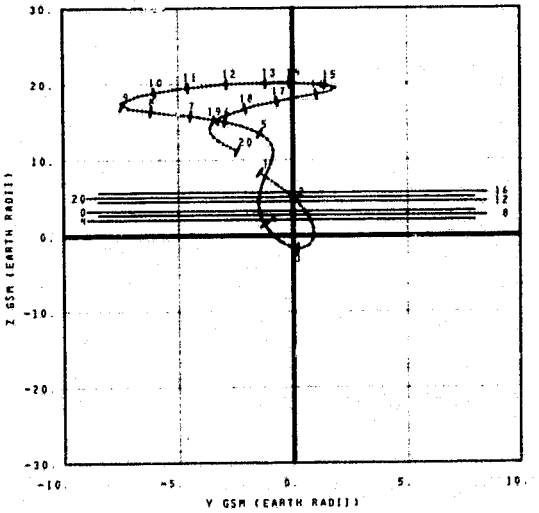
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/169/23.00H TO 1976/171/24.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/169/	23.17H	R= 10.4RE	11 - 1976/171/	3.33H	R= 20.1RE
2 - 1976/170/	1.50H	R= 7.2RE	12 - 1976/171/	4.83H	R= 20.2RE
3 - 1976/170/	4.67H	R= 1.7RE	13 - 1976/171/	6.33H	R= 20.3RE
4 - 1976/170/	6.08H	R= 4.3RE	14 - 1976/171/	7.33H	R= 20.2RE
5 - 1976/170/	14.08H	R= 14.3RE	15 - 1976/171/	9.33H	R= 20.1RE
6 - 1976/170/	16.00H	R= 15.8RE	16 - 1976/171/	13.83H	R= 19.1RE
7 - 1976/170/	17.50H	R= 16.8RE	17 - 1976/171/	15.83H	R= 18.3RE
8 - 1976/170/	19.33H	R= 17.7RE	18 - 1976/171/	17.33H	R= 17.6RE
9 - 1976/170/	21.83H	R= 18.8RE	19 - 1976/171/	19.33H	R= 16.9RE
10 - 1976/171/	1.83H	R= 19.9RE	20 - 1976/171/	24.00H	R= 13.0RE

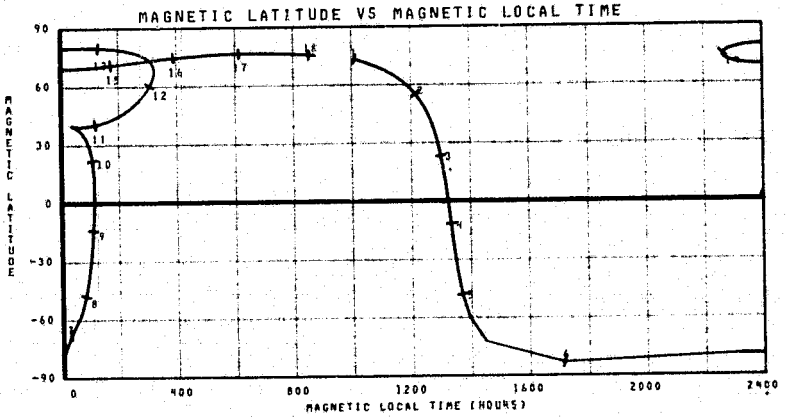
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/169/23.00H TO 1976/171/24.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

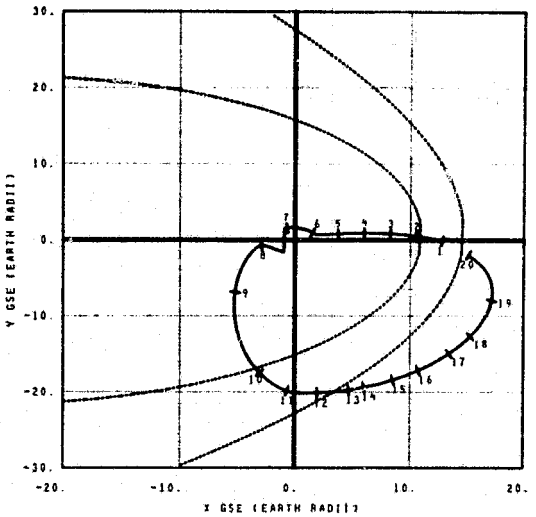
1 - 1976/169/	23.17H	R= 10.4RE	8 - 1976/170/	5.00H	R= 2.1RE	15 - 1976/171/	17.83H	R= 17.4RE
2 - 1976/170/	1.67H	R= 7.0RE	9 - 1976/170/	9.45H	R= 3.0RE	16 - 1976/171/	20.33H	R= 15.9RE
3 - 1976/170/	3.42H	R= 5.7RE	10 - 1976/170/	6.83H	R= 5.7RE	17 - 1976/171/	22.17H	R= 14.6RE
4 - 1976/170/	4.08H	R= 2.3RE	11 - 1976/170/	16.83H	R= 14.4RE	18 - 1976/171/	23.83H	R= 13.1RE
5 - 1976/170/	4.42H	R= 1.8RE	12 - 1976/171/	0.33H	R= 19.5RE			
6 - 1976/170/	4.67H	R= 1.7RE	13 - 1976/171/	6.33H	R= 20.3RE			
7 - 1976/170/	4.83H	R= 1.8RE	14 - 1976/171/	10.33H	R= 19.9RE			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/169/23.00H TO1976/171/24.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/172/	0.17 H	LAT= 61.2	11 - 1976/173/	5.00 H	LAT= 81.8
2 - 1976/172/	2.33 H	LAT= 54.2	12 - 1976/173/	7.50 H	LAT= 81.8
3 - 1976/172/	4.00 H	LAT= 45.8	13 - 1976/173/	8.50 H	LAT= 81.9
4 - 1976/172/	5.42 H	LAT= 33.5	14 - 1976/173/	9.00 H	LAT= 81.9
5 - 1976/172/	6.58 H	LAT= 11.9	15 - 1976/173/	10.00 H	LAT= 81.7
6 - 1976/172/	7.67 H	LAT= -69.8	16 - 1976/173/	11.00 H	LAT= 81.5
7 - 1976/172/	7.97 H	LAT= -66.6	17 - 1976/173/	12.50 H	LAT= 80.8
8 - 1976/172/	8.68 H	LAT= -1.7	18 - 1976/173/	14.00 H	LAT= 79.8
9 - 1976/172/	11.83 H	LAT= 99.0	19 - 1976/173/	17.50 H	LAT= 76.9
10 - 1976/172/	22.50 H	LAT= 75.9	20 - 1976/174/	0.50 H	LAT= 67.5

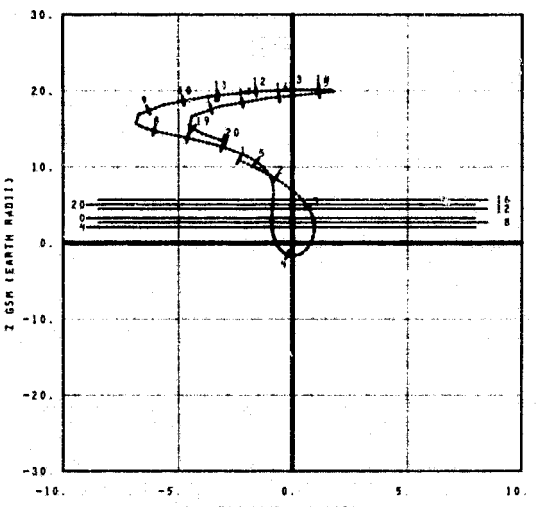
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/171/24.00H TO 1976/174/ 1.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/172/	0.17 H	R= 12.8 R_E	11 - 1976/173/	4.50 H	R= 19.8 R_E
2 - 1976/172/	2.33 H	R= 10.5 R_E	12 - 1976/173/	6.00 H	R= 20.6 R_E
3 - 1976/172/	4.67 H	R= 7.3 R_E	13 - 1976/173/	7.50 H	R= 20.2 R_E
4 - 1976/172/	8.02 H	R= 1.8 R_E	14 - 1976/173/	9.00 H	R= 20.3 R_E
5 - 1976/172/	10.67 H	R= 12.0 R_E	15 - 1976/173/	13.50 H	R= 19.9 R_E
6 - 1976/172/	16.67 H	R= 13.9 R_E	16 - 1976/173/	15.50 H	R= 19.5 R_E
7 - 1976/172/	18.33 H	R= 15.2 R_E	17 - 1976/173/	17.00 H	R= 19.1 R_E
8 - 1976/172/	20.17 H	R= 16.5 R_E	18 - 1976/173/	18.50 H	R= 18.9 R_E
9 - 1976/173/	1.00 H	R= 18.8 R_E	19 - 1976/173/	22.50 H	R= 16.6 R_E
10 - 1976/173/	3.00 H	R= 19.4 R_E	20 - 1976/174/	1.00 H	R= 14.8 R_E

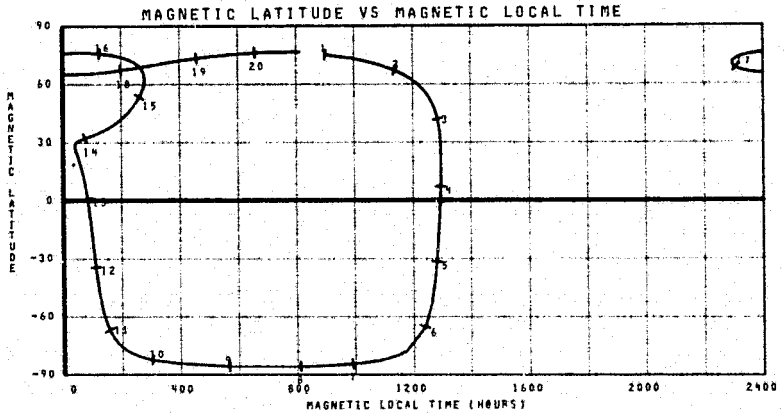
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/171/24.00H TO 1976/174/ 1.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

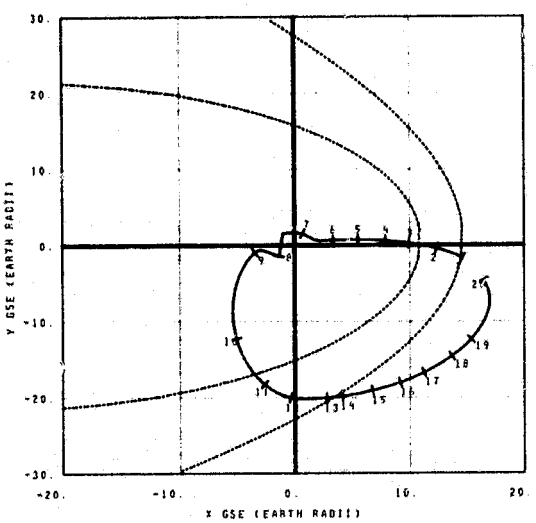
1 - 1976/172/	0.17 H	R= 12.8 R_E	8 - 1976/172/	7.50 H	R= 1.7 R_E	15 - 1976/172/	23.50 H	R= 10.2 R_E
2 - 1976/172/	2.50 H	R= 10.3 R_E	9 - 1976/172/	7.92 H	R= 1.7 R_E	16 - 1976/173/	6.00 H	R= 20.0 R_E
3 - 1976/172/	5.67 H	R= 5.6 R_E	10 - 1976/172/	7.95 H	R= 1.7 R_E	17 - 1976/173/	12.00 H	R= 20.1 R_E
4 - 1976/172/	7.00 H	R= 3.0 R_E	11 - 1976/172/	8.07 H	R= 1.8 R_E	18 - 1976/173/	18.50 H	R= 18.2 R_E
5 - 1976/172/	7.50 H	R= 2.0 R_E	12 - 1976/172/	8.38 H	R= 2.4 R_E	19 - 1976/173/	22.00 H	R= 16.5 R_E
6 - 1976/172/	7.75 H	R= 1.7 R_E	13 - 1976/172/	9.17 H	R= 4.0 R_E	20 - 1976/173/	23.83 H	R= 13.7 R_E
7 - 1976/172/	7.88 H	R= 1.7 R_E	14 - 1976/172/	15.50 H	R= 12.8 R_E			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/171/24.00H TO1976/174/ 1.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/174/	1.17H	LAT=	66.2	11 - 1976/175/	3.33H	LAT=	77.2
2 - 1976/174/	3.83H	LAT=	60.0	12 - 1976/175/	9.33H	LAT=	81.5
3 - 1976/174/	6.00H	LAT=	52.3	13 - 1976/175/	11.33H	LAT=	81.9
4 - 1976/174/	7.50H	LAT=	43.9	14 - 1976/175/	11.83H	LAT=	81.9
5 - 1976/174/	8.92H	LAT=	29.7	15 - 1976/175/	12.83H	LAT=	81.8
6 - 1976/174/	10.00H	LAT=	9.5	16 - 1976/175/	13.83H	LAT=	81.6
7 - 1976/174/	11.00H	LAT=	-80.2	17 - 1976/175/	14.83H	LAT=	81.2
8 - 1976/174/	11.33H	LAT=	-46.4	18 - 1976/175/	16.33H	LAT=	80.5
9 - 1976/174/	12.13H	LAT=	8.3	19 - 1976/175/	17.83H	LAT=	79.4
10 - 1976/174/	19.17H	LAT=	64.3	20 - 1976/176/	0.83H	LAT=	72.1

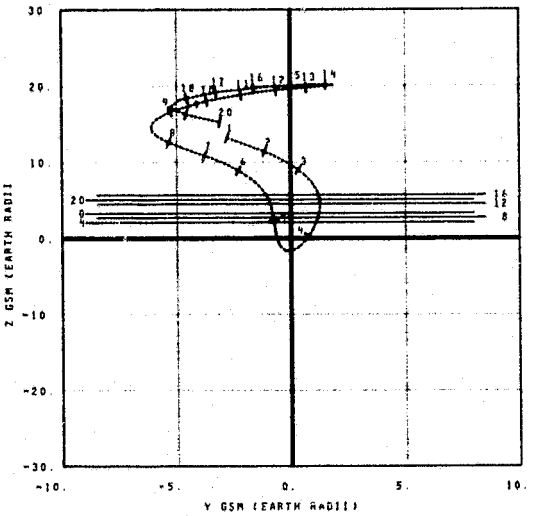
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/174/ 1.00H TO 1976/176/ 2.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/174/	1.17H	R=	19.7R_E	11 - 1976/175/	5.33H	R=	19.1R_E
2 - 1976/174/	3.17H	R=	13.0R_E	12 - 1976/175/	6.83H	R=	19.6R_E
3 - 1976/174/	5.17H	R=	10.9R_E	13 - 1976/175/	8.33H	R=	19.9R_E
4 - 1976/174/	9.92H	R=	3.6R_E	14 - 1976/175/	12.83H	R=	20.3R_E
5 - 1976/174/	12.83H	R=	4.9R_E	15 - 1976/175/	14.83H	R=	20.2R_E
6 - 1976/174/	16.67H	R=	10.6R_E	16 - 1976/175/	16.33H	R=	20.0R_E
7 - 1976/174/	18.50H	R=	12.6R_E	17 - 1976/175/	17.83H	R=	19.7R_E
8 - 1976/174/	20.67H	R=	14.5R_E	18 - 1976/175/	19.33H	R=	19.3R_E
9 - 1976/175/	1.83H	R=	17.8R_E	19 - 1976/175/	23.83H	R=	17.4R_E
10 - 1976/175/	3.83H	R=	18.6R_E	20 - 1976/176/	1.83H	R=	16.5R_E

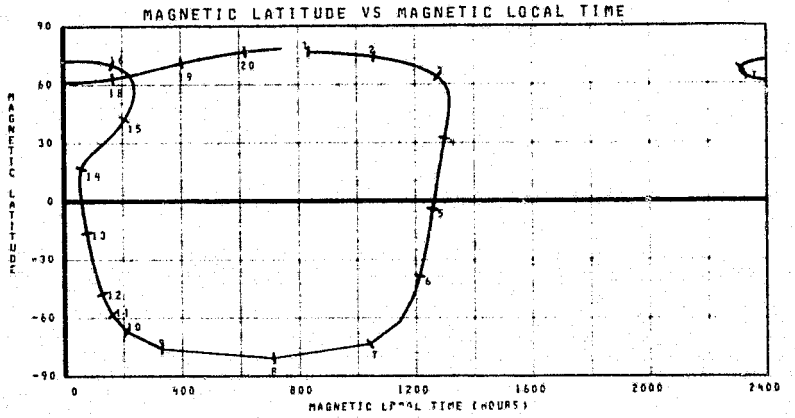
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/174/ 1.00H TO 1976/176/ 2.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

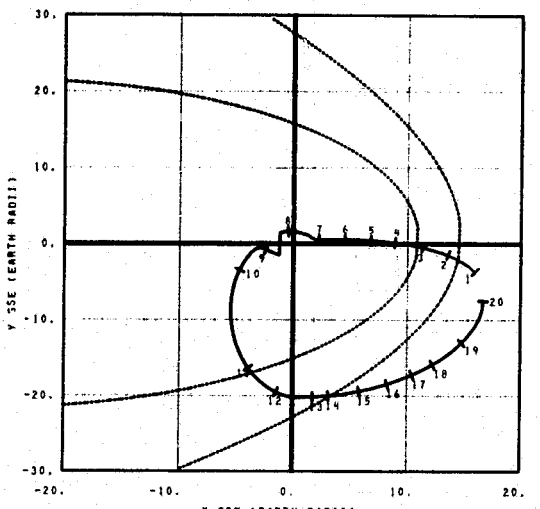
1 - 1976/174/	1.17H	R=	19.7R_E	8 - 1976/174/	11.17H	R=	1.7R_E	15 - 1976/175/	21.83H	R=	19.9R_E
2 - 1976/174/	3.00H	R=	13.2R_E	9 - 1976/174/	11.25H	R=	1.0R_E	16 - 1976/175/	4.83H	R=	19.0R_E
3 - 1976/174/	4.17H	R=	9.7R_E	10 - 1976/174/	11.33H	R=	1.9R_E	17 - 1976/175/	10.33H	R=	20.2R_E
4 - 1976/174/	9.67H	R=	3.1R_E	11 - 1976/174/	11.92H	R=	2.1R_E	18 - 1976/175/	18.33H	R=	19.6R_E
5 - 1976/174/	10.50H	R=	2.4R_E	12 - 1976/174/	11.92H	R=	2.3R_E	19 - 1976/175/	22.33H	R=	18.3R_E
6 - 1976/174/	10.83H	R=	1.8R_E	13 - 1976/174/	12.12H	R=	3.5R_E	20 - 1976/176/	0.83H	R=	17.1R_E
7 - 1976/174/	11.08H	R=	1.7R_E	14 - 1976/174/	14.83H	R=	8.3R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/174 / 1.00H TO1976/176 / 2.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/176/	2.00 H	LAT=	70.4	11 - 1976/177/	3.17 H	LAT=	73.1
2 - 1976/176/	5.67 H	LAT=	63.6	12 - 1976/177/	10.00 H	LAT=	80.1
3 - 1976/176/	8.00 H	LAT=	57.1	13 - 1976/177/	14.50 H	LAT=	81.9
4 - 1976/176/	10.00 H	LAT=	48.5	14 - 1976/177/	15.00 H	LAT=	81.9
5 - 1976/176/	11.92 H	LAT=	38.2	15 - 1976/177/	16.00 H	LAT=	81.9
6 - 1976/176/	12.67 H	LAT=	20.2	16 - 1976/177/	17.00 H	LAT=	81.6
7 - 1976/176/	13.75 H	LAT=	-26.7	17 - 1976/177/	18.00 H	LAT=	81.3
8 - 1976/176/	14.33 H	LAT=	-74.9	18 - 1976/177/	19.00 H	LAT=	80.8
9 - 1976/176/	14.87 H	LAT=	-16.2	19 - 1976/177/	21.00 H	LAT=	79.5
10 - 1976/176/	16.50 H	LAT=	33.4	20 - 1976/178/	1.50 H	LAT=	75.3

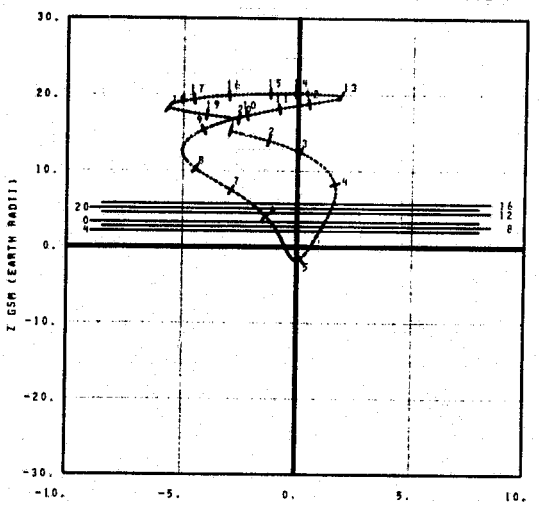
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/176/ 2.00H TO 1976/178/ 3.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/176/	2.00 H	R=	16.4 R_E	11 - 1976/177/	6.50 H	R=	18.4 R_E
2 - 1976/176/	3.83 H	R=	15.1 R_E	12 - 1976/177/	8.00 H	R=	19.0 R_E
3 - 1976/176/	5.50 H	R=	13.8 R_E	13 - 1976/177/	12.00 H	R=	20.0 R_E
4 - 1976/176/	8.83 H	R=	10.4 R_E	14 - 1976/177/	15.00 H	R=	20.2 R_E
5 - 1976/176/	14.00 H	R=	1.9 R_E	15 - 1976/177/	16.00 H	R=	20.3 R_E
6 - 1976/176/	16.92 H	R=	6.5 R_E	16 - 1976/177/	17.50 H	R=	20.2 R_E
7 - 1976/176/	19.08 H	R=	9.7 R_E	17 - 1976/177/	19.00 H	R=	20.1 R_E
8 - 1976/176/	21.50 H	R=	12.4 R_E	18 - 1976/177/	22.50 H	R=	19.3 R_E
9 - 1976/177/	2.67 H	R=	16.5 R_E	19 - 1976/178/	1.50 H	R=	18.3 R_E
10 - 1976/177/	5.00 H	R=	17.7 R_E	20 - 1976/178/	3.00 H	R=	17.6 R_E

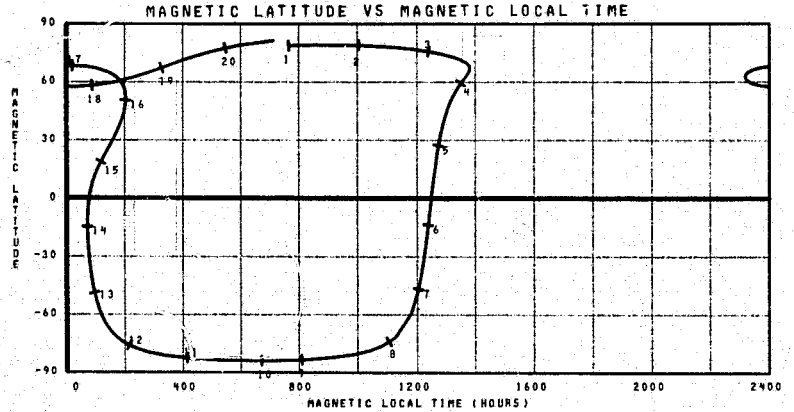
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/176/ 2.00H TO 1976/178/ 3.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/176/	2.00 H	R=	16.4 R_E	8 - 1976/176/	14.33 H	R=	1.7 R_E	15 - 1976/176/	18.75 H	R=	9.2 R_E
2 - 1976/176/	3.67 H	R=	15.3 R_E	9 - 1976/176/	14.43 H	R=	1.8 R_E	16 - 1976/177/	0.83 H	R=	15.2 R_E
3 - 1976/176/	5.83 H	R=	13.9 R_E	10 - 1976/176/	14.45 H	R=	1.8 R_E	17 - 1976/177/	7.00 H	R=	18.6 R_E
4 - 1976/176/	11.50 H	R=	4.7 R_E	11 - 1976/176/	14.48 H	R=	1.8 R_E	18 - 1976/177/	17.00 H	R=	20.2 R_E
5 - 1976/176/	13.33 H	R=	3.1 R_E	12 - 1976/176/	14.55 H	R=	1.9 R_E	19 - 1976/177/	22.00 H	R=	19.5 R_E
6 - 1976/176/	13.92 H	R=	2.8 R_E	13 - 1976/176/	14.85 H	R=	2.5 R_E	20 - 1976/178/	1.50 H	R=	18.3 R_E
7 - 1976/176/	14.17 H	R=	1.7 R_E	14 - 1976/176/	15.67 H	R=	4.2 R_E				

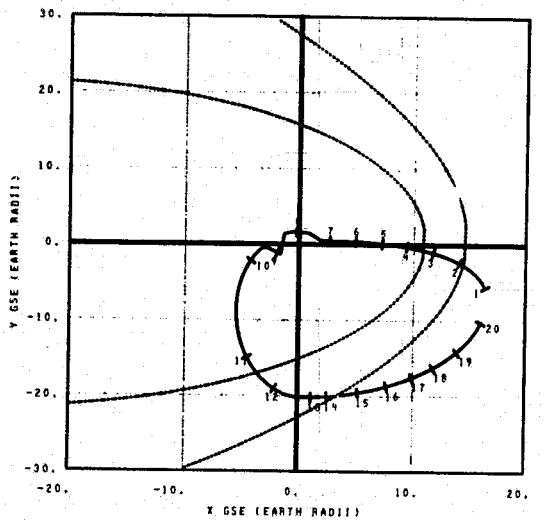
TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/176 / 2.00H TO1976/178 / 3.00H

C-2

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/178/ 3.50H	LAT= 72.9	11 - 1976/179/ 9.50H	LAT= 78.1
2 - 1976/178/ 8.17H	LAT= 65.2	12 - 1976/179/ 11.83H	LAT= 79.1
3 - 1976/178/ 10.83H	LAT= 58.4	13 - 1976/179/ 17.83H	LAT= 81.9
4 - 1976/178/ 12.83H	LAT= 50.5	14 - 1976/179/ 18.33H	LAT= 81.9
5 - 1976/178/ 14.33H	LAT= 40.9	15 - 1976/179/ 19.33H	LAT= 81.9
6 - 1976/178/ 15.67H	LAT= 29.6	16 - 1976/179/ 20.33H	LAT= 81.6
7 - 1976/178/ 16.75H	LAT= -11.3	17 - 1976/179/ 21.33H	LAT= 81.3
8 - 1976/178/ 17.50H	LAT= -79.7	18 - 1976/179/ 22.33H	LAT= 80.8
9 - 1976/178/ 17.92H	LAT= -29.9	19 - 1976/179/ 23.83H	LAT= 79.9
10 - 1976/178/ 19.17H	LAT= 24.5	20 - 1976/180/ 2.83H	LAT= 77.9

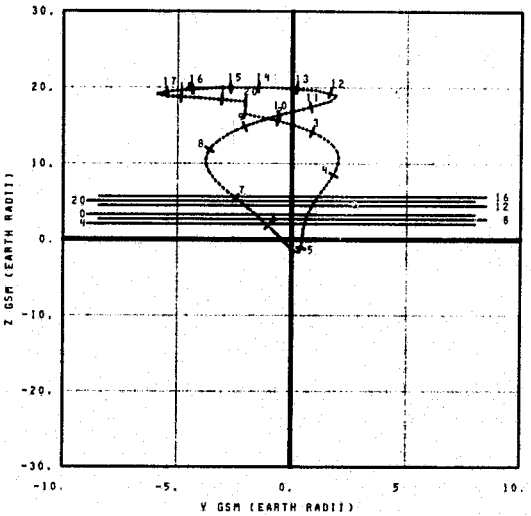
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/178/ 3.00H TO 1976/180/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/178/ 3.50H	R= 17.4RE	11 - 1976/179/ 9.33H	R= 17.[illegible]RE
2 - 1976/178/ 5.00H	R= 16.5RE	12 - 1976/179/ 12.83H	R= 19.[illegible]RE
3 - 1976/178/ 6.83H	R= 15.3RE	13 - 1976/179/ 14.83H	R= 19.[illegible]RE
4 - 1976/178/ 11.83H	R= 10.7RE	14 - 1976/179/ 16.33H	R= 20.1[illegible]RE
5 - 1976/178/ 17.00H	R= 2.2RE	15 - 1976/179/ 17.33H	R= 20.2[illegible]RE
6 - 1976/178/ 19.17H	R= 4.8RE	16 - 1976/179/ 18.83H	R= 20.3[illegible]RE
7 - 1976/178/ 21.08H	R= 8.0RE	17 - 1976/179/ 20.33H	R= 20.2RE
8 - 1976/179/ 1.83H	R= 13.5RE	18 - 1976/180/ 0.83H	R= 19.6RE
9 - 1976/179/ 4.67H	R= 15.7RE	19 - 1976/180/ 2.83H	R= 19.0RE
10 - 1976/179/ 6.50H	R= 16.8RE	20 - 1976/180/ 3.83H	R= 18.6RE

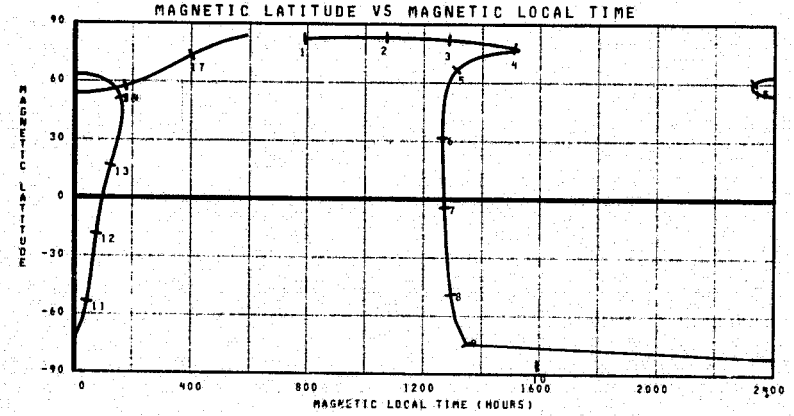
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/178/ 3.00H TO 1976/180/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

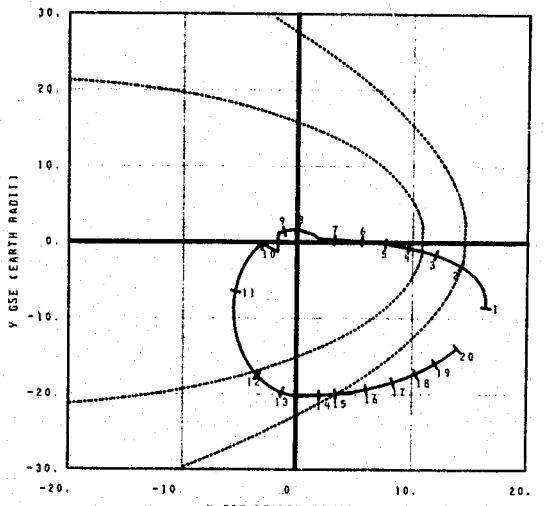
1 - 1976/178/ 3.50H	R= 17.4RE	8 - 1976/178/ 17.42H	R= 1.7RE	15 - 1976/179/ 9.83H	R= 18.8RE
2 - 1976/178/ 5.00H	R= 16.5RE	9 - 1976/178/ 17.50H	R= 1.7RE	16 - 1976/179/ 19.33H	R= 20.3RE
3 - 1976/178/ 6.33H	R= 15.6RE	10 - 1976/178/ 17.67H	R= 1.8RE	17 - 1976/180/ 0.83H	R= 19.4RE
4 - 1976/178/ 9.67H	R= 12.9RE	11 - 1976/178/ 18.92H	R= 2.4RE		
5 - 1976/178/ 15.00H	R= 6.2RE	12 - 1976/178/ 18.75H	R= 3.9RE		
6 - 1976/178/ 16.58H	R= 3.1RE	13 - 1976/178/ 21.00H	R= 7.9RE		
7 - 1976/178/ 17.08H	R= 2.1RE	14 - 1976/179/ 2.33H	R= 13.9RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/178/ 3.00H TO1976/180/ 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/180/	4.33 H	LAT= 75.8	11 - 1976/181/	0.58 H	LAT=	48.2
2 - 1976/180/	11.00 H	LAT= 66.1	12 - 1976/181/	11.67 H	LAT=	75.6
3 - 1976/180/	13.67 H	LAT= 59.7	13 - 1976/181/	17.67 H	LAT=	80.8
4 - 1976/180/	15.83 H	LAT= 51.7	14 - 1976/181/	21.67 H	LAT=	81.9
5 - 1976/180/	17.33 H	LAT= 42.7	15 - 1976/181/	22.17 H	LAT=	81.9
6 - 1976/180/	18.58 H	LAT= 29.6	16 - 1976/181/	23.17 H	LAT=	81.8
7 - 1976/180/	19.75 H	LAT= 0.0	17 - 1976/182/	0.17 H	LAT=	81.5
8 - 1976/180/	20.67 H	LAT= -81.9	18 - 1976/182/	1.17 H	LAT=	81.0
9 - 1976/180/	20.92 H	LAT= -52.9	19 - 1976/182/	2.17 H	LAT=	80.5
10 - 1976/180/	21.65 H	LAT= 3.5	20 - 1976/182/	3.67 H	LAT=	79.5

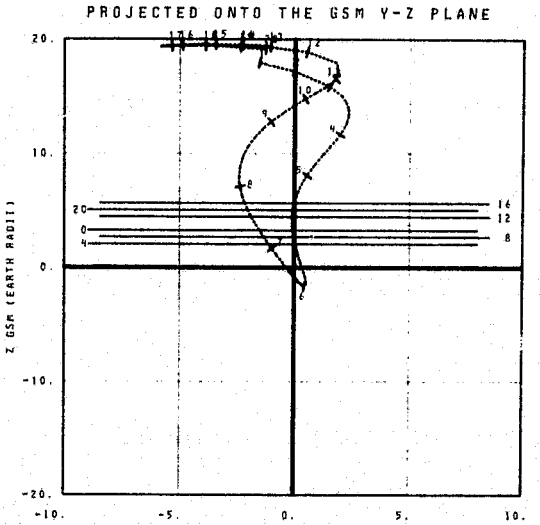
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/180/ 4.00H TO 1976/182/ 5.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/180/	4.33 H	R= 18.5 R_E	11 - 1976/181/	10.17 H	R= 17.1 R_E
2 - 1976/180/	5.83 H	R= 17.8 R_E	12 - 1976/181/	14.67 H	R= 19.1 R_E
3 - 1976/180/	7.83 H	R= 16.7 R_E	13 - 1976/181/	16.17 H	R= 19.5 R_E
4 - 1976/180/	12.50 H	R= 13.3 R_E	14 - 1976/181/	17.17 H	R= 19.7 R_E
5 - 1976/180/	15.50 H	R= 10.1 R_E	15 - 1976/181/	18.17 H	R= 19.9 R_E
6 - 1976/180/	20.75 H	R= 1.7 R_E	16 - 1976/181/	19.67 H	R= 20.1 R_E
7 - 1976/180/	22.33 H	R= 4.7 R_E	17 - 1976/182/	0.17 H	R= 20.2 R_E
8 - 1976/181/	1.25 H	R= 9.3 R_E	18 - 1976/182/	2.17 H	R= 20.0 R_E
9 - 1976/181/	5.50 H	R= 13.9 R_E	19 - 1976/182/	3.67 H	R= 19.7 R_E
10 - 1976/181/	7.67 H	R= 15.5 R_E	20 - 1976/182/	4.67 H	R= 19.4 R_E

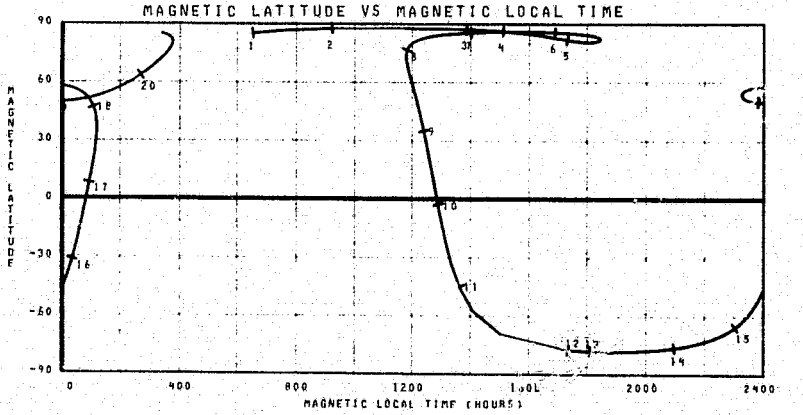
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/180/ 4.00H TO 1976/182/ 5.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

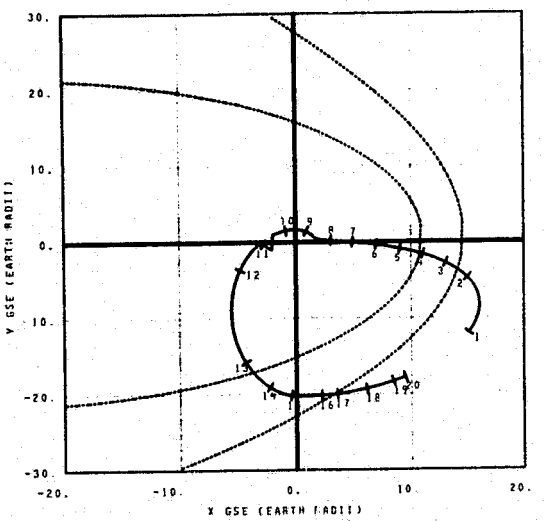
1 - 1976/180/	4.33 H	R= 18.5 R_E	8 - 1976/180/	17.42 H	R= 7.5 R_E	15 - 1976/180/	21.03 H	R= 2.8 R_E
2 - 1976/180/	5.33 H	R= 18.0 R_E	9 - 1976/180/	19.67 H	R= 3.3 R_E	16 - 1976/180/	21.48 H	R= 2.9 R_E
3 - 1976/180/	6.33 H	R= 17.4 R_E	10 - 1976/180/	20.25 H	R= 2.1 R_E	17 - 1976/180/	22.03 H	R= 3.4 R_E
4 - 1976/180/	8.83 H	R= 17.3 R_E	11 - 1976/180/	20.58 H	R= 1.7 R_E	18 - 1976/181/	3.17 H	R= 11.6 R_E
5 - 1976/180/	9.33 H	R= 15.8 R_E	12 - 1976/180/	20.83 H	R= 1.8 R_E	19 - 1976/181/	14.67 H	R= 19.1 R_E
6 - 1976/180/	15.00 H	R= 10.7 R_E	13 - 1976/180/	20.85 H	R= 1.8 R_E	20 - 1976/181/	22.67 H	R= 20.3 R_E
7 - 1976/180/	15.83 H	R= 9.7 R_E	14 - 1976/180/	20.92 H	R= 1.9 R_E			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/180 / 4.00H TO1976/182 / 5.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/182/	5.17H	LAT=	78.3	11 -	1976/183/	0.70H	LAT=	-4.1
2 -	1976/182/	12.67H	LAT=	69.0	12 -	1976/183/	2.33H	LAT=	35.7
3 -	1976/182/	15.67H	LAT=	63.0	13 -	1976/183/	12.17H	LAT=	72.0
4 -	1976/182/	17.83H	LAT=	56.7	14 -	1976/183/	16.33H	LAT=	79.0
5 -	1976/182/	19.50H	LAT=	49.6	15 -	1976/183/	23.33H	LAT=	81.8
6 -	1976/182/	20.92H	LAT=	39.8	16 -	1976/184/	1.33H	LAT=	81.9
7 -	1976/182/	22.08H	LAT=	25.1	17 -	1976/184/	1.83H	LAT=	81.9
8 -	1976/182/	23.00H	LAT=	-1.4	18 -	1976/184/	2.83H	LAT=	81.7
9 -	1976/182/	23.85H	LAT=	-80.1	19 -	1976/184/	3.83H	LAT=	81.3
10 -	1976/183/	0.08H	LAT=	-59.1	20 -	1976/184/	4.33H	LAT=	81.1

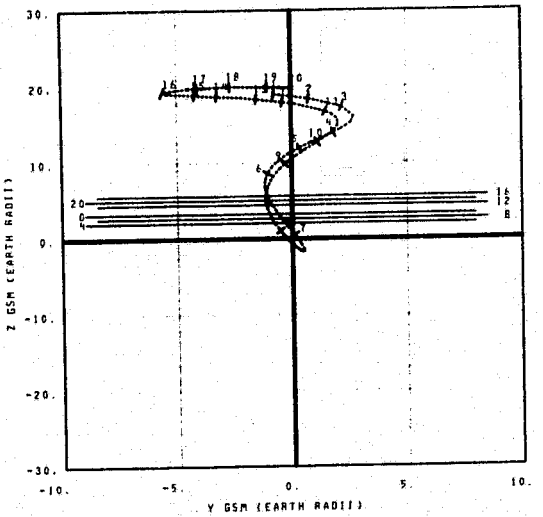
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/182/ 5.00H TO 1976/184/ 6.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/182/	5.17H	R=	19.3RE	11 -	1976/183/	13.67H	R=	17.3RE
2 -	1976/182/	6.67H	R=	18.8RE	12 -	1976/183/	15.83H	R=	18.3RE
3 -	1976/182/	8.67H	R=	18.0RE	13 -	1976/183/	16.83H	R=	18.7RE
4 -	1976/182/	13.50H	R=	15.1RE	14 -	1976/183/	18.33H	R=	19.2RE
5 -	1976/182/	15.67H	R=	13.3RE	15 -	1976/183/	19.33H	R=	19.5RE
6 -	1976/182/	18.33H	R=	10.6RE	16 -	1976/183/	22.33H	R=	20.1RE
7 -	1976/182/	22.75H	R=	3.6RE	17 -	1976/184/	1.83H	R=	20.3RE
8 -	1976/183/	1.23H	R=	4.0RE	18 -	1976/184/	3.33H	R=	20.2RE
9 -	1976/183/	6.17H	R=	11.4RE	19 -	1976/184/	4.83H	R=	20.0RE
10 -	1976/183/	8.67H	R=	13.8RE	20 -	1976/184/	5.83H	R=	19.9RE

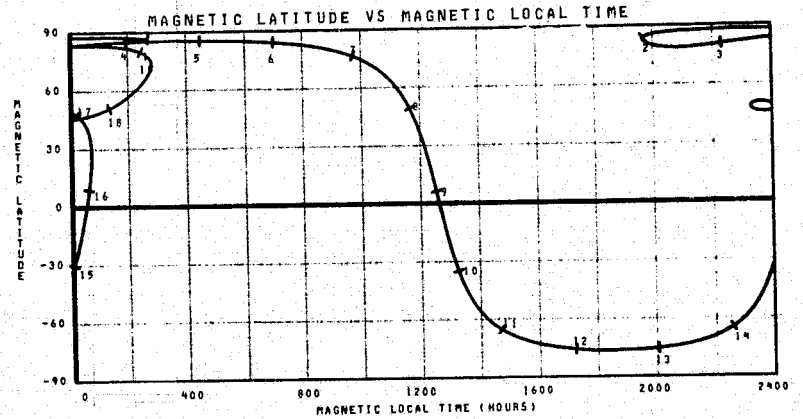
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/182/ 5.00H TO 1976/184/ 6.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

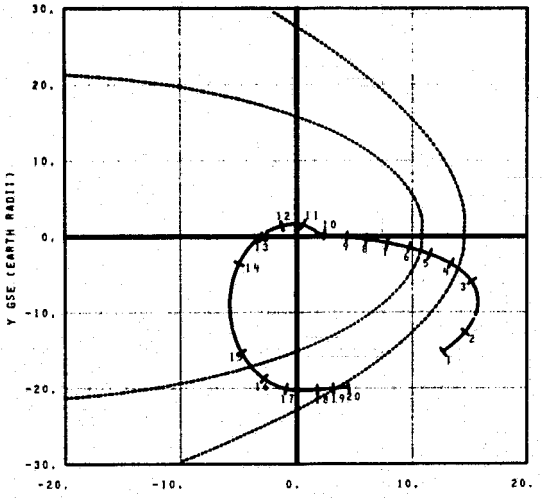
1 -	1976/182/	5.17H	R=	19.3RE	8 -	1976/182/	22.08H	R=	5.0RE
2 -	1976/182/	8.17H	R=	18.2RE	9 -	1976/182/	23.25H	R=	2.6RE
3 -	1976/182/	14.67H	R=	14.2RE	10 -	1976/182/	23.67H	R=	1.8RE
4 -	1976/182/	17.00H	R=	12.0RE	11 -	1976/182/	23.88H	R=	1.7RE
5 -	1976/182/	17.67H	R=	11.3RE	12 -	1976/182/	23.98H	R=	1.7RE
6 -	1976/182/	18.33H	R=	10.6RE	13 -	1976/183/	0.05H	R=	1.8RE
7 -	1976/182/	19.75H	R=	8.8RE	14 -	1976/183/	0.17H	R=	1.9RE
					15 -	1976/183/	0.58H	R=	2.6RE
					16 -	1976/183/	1.58H	R=	4.7RE
					17 -	1976/183/	6.08H	R=	11.2RE
					18 -	1976/183/	19.33H	R=	19.3RE
					19 -	1976/184/	3.83H	R=	20.2RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/182 / 5.00H TO1976/184 / 6.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/184/	6.33 H	LAT= 79.9	11 - 1976/185/	3.00 H	LAT= -81.4
2 - 1976/184/	8.33 H	LAT= 78.3	12 - 1976/185/	3.33 H	LAT= -80.1
3 - 1976/184/	15.00 H	LAT= 76.5	13 - 1976/185/	3.98 H	LAT= -0.6
4 - 1976/184/	18.33 H	LAT= 64.9	14 - 1976/185/	5.50 H	LAT= 55.2
5 - 1976/184/	20.50 H	LAT= 58.6	15 - 1976/185/	19.67 H	LAT= 76.0
6 - 1976/184/	22.17 H	LAT= 52.9	16 - 1976/185/	20.67 H	LAT= 78.2
7 - 1976/184/	23.50 H	LAT= 49.3	17 - 1976/186/	1.67 H	LAT= 81.5
8 - 1976/185/	0.75 H	LAT= 33.9	18 - 1976/186/	4.67 H	LAT= 81.9
9 - 1976/185/	1.67 H	LAT= 17.4	19 - 1976/186/	5.17 H	LAT= 81.9
10 - 1976/185/	2.50 H	LAT= -24.3	20 - 1976/186/	5.67 H	LAT= 81.8

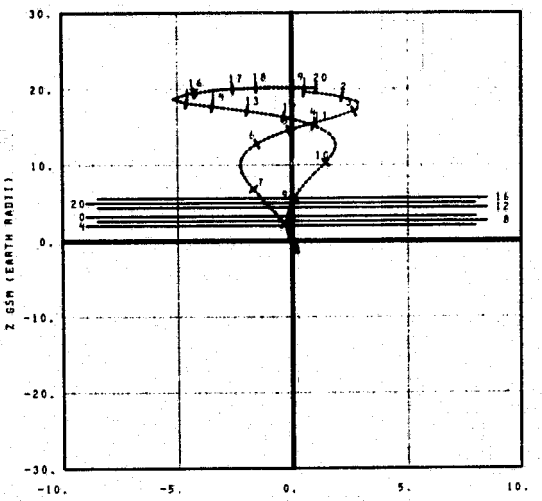
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/184/ 6.00H TO 1976/186/ 7.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/184/	6.33 H	R= 19.0 R_E	11 - 1976/185/	14.67 H	R= 15.9 R_E
2 - 1976/184/	8.33 H	R= 19.3 R_E	12 - 1976/185/	16.17 H	R= 16.9 R_E
3 - 1976/184/	12.33 H	R= 17.8 R_E	13 - 1976/185/	17.67 H	R= 17.7 R_E
4 - 1976/184/	14.83 H	R= 16.4 R_E	14 - 1976/185/	19.17 H	R= 18.3 R_E
5 - 1976/184/	16.17 H	R= 15.9 R_E	15 - 1976/185/	20.67 H	R= 18.9 R_E
6 - 1976/184/	18.00 H	R= 14.1 R_E	16 - 1976/186/	1.17 H	R= 20.0 R_E
7 - 1976/184/	22.67 H	R= 9.2 R_E	17 - 1976/186/	3.17 H	R= 20.2 R_E
8 - 1976/185/	1.25 H	R= 5.1 R_E	18 - 1976/186/	4.17 H	R= 20.3 R_E
9 - 1976/185/	6.50 H	R= 7.7 R_E	19 - 1976/186/	5.67 H	R= 20.3 R_E
10 - 1976/185/	9.83 H	R= 11.9 R_E	20 - 1976/186/	6.67 H	R= 20.2 R_E

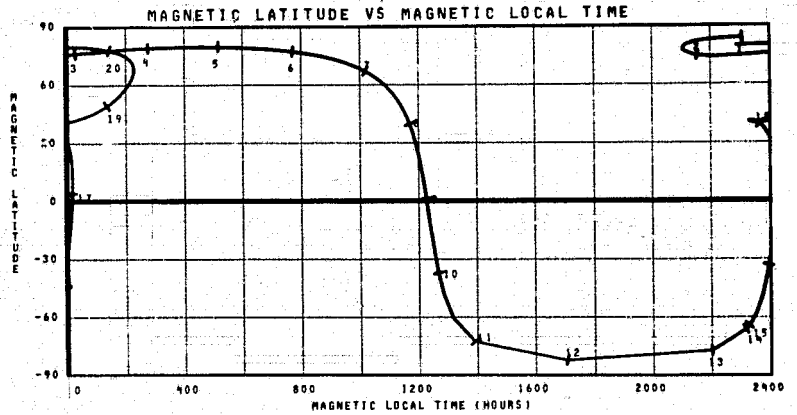
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/184/ 6.00H TO 1976/186/ 7.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

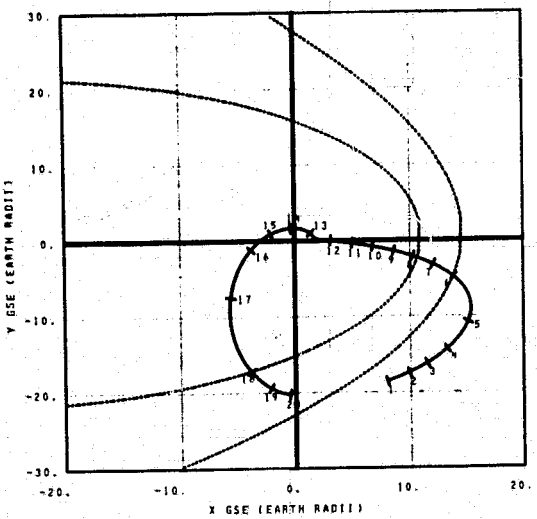
1 - 1976/184/	6.33 H	R= 14.6 R_E	8 - 1976/185/	1.33 H	R= 4.9 R_E
2 - 1976/184/	11.83 H	R= 18.0 R_E	9 - 1976/185/	2.42 H	R= 2.7 R_E
3 - 1976/184/	14.33 H	R= 15.9 R_E	10 - 1976/185/	2.83 H	R= 1.9 R_E
4 - 1976/184/	18.33 H	R= 13.0 R_E	11 - 1976/185/	3.08 H	R= 1.7 R_E
5 - 1976/184/	19.67 H	R= 12.6 R_E	12 - 1976/185/	3.17 H	R= 1.7 R_E
6 - 1976/184/	21.00 H	R= 11.2 R_E	13 - 1976/185/	3.25 H	R= 1.7 R_E
7 - 1976/184/	23.00 H	R= 8.7 R_E	14 - 1976/185/	3.33 H	R= 1.8 R_E
			15 - 1976/185/	3.58 H	R= 1.9 R_E
			16 - 1976/185/	3.67 H	R= 2.4 R_E
			17 - 1976/185/	4.92 H	R= 4.0 R_E
			18 - 1976/185/	5.08 H	R= 5.0 R_E
			19 - 1976/185/	20.17 H	R= 18.7 R_E
			20 - 1976/186/	4.17 H	R= 20.3 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/184 / 6.00H TO1976/186 / 7.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/186/	7.17H	LAT=	61.3	11 - 1976/187/	9.50H	LAT=	25.5
2 - 1976/186/	8.17H	LAT=	80.8	12 - 1976/187/	9.92H	LAT=	-0.4
3 - 1976/186/	9.17H	LAT=	80.2	13 - 1976/187/	6.25H	LAT=	-74.7
4 - 1976/186/	10.67H	LAT=	79.1	14 - 1976/187/	6.90H	LAT=	-79.7
5 - 1976/186/	13.67H	LAT=	76.4	15 - 1976/187/	6.85H	LAT=	-22.6
6 - 1976/186/	20.50H	LAT=	66.6	16 - 1976/187/	7.68H	LAT=	16.7
7 - 1976/186/	23.00H	LAT=	60.8	17 - 1976/187/	10.92H	LAT=	52.0
8 - 1976/187/	0.83H	LAT=	54.8	18 - 1976/187/	20.83H	LAT=	79.9
9 - 1976/187/	2.25H	LAT=	47.9	19 - 1976/188/	1.83H	LAT=	79.8
10 - 1976/187/	3.50H	LAT=	38.6	20 - 1976/188/	6.33H	LAT=	81.8

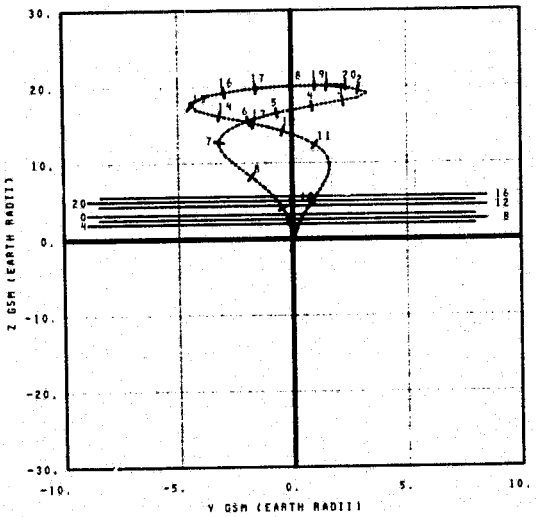
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/186/ 7.00H TO 1976/188/ 8.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/186/	7.17H	R=	20.1RE	11 - 1976/187/	14.83H	R=	13.6RE
2 - 1976/186/	8.17H	R=	19.9RE	12 - 1976/187/	16.67H	R=	15.1RE
3 - 1976/186/	9.17H	R=	18.6RE	13 - 1976/187/	18.00H	R=	16.0RE
4 - 1976/186/	10.67H	R=	17.9RE	14 - 1976/187/	19.67H	R=	17.0RE
5 - 1976/186/	13.67H	R=	17.2RE	15 - 1976/187/	22.33H	R=	18.3RE
6 - 1976/186/	20.50H	R=	16.9RE	16 - 1976/188/	2.33H	R=	19.6RE
7 - 1976/186/	23.00H	R=	14.3RE	17 - 1976/188/	3.83H	R=	19.9RE
8 - 1976/187/	1.00H	R=	10.3RE	18 - 1976/188/	5.33H	R=	20.1RE
9 - 1976/187/	3.50H	R=	6.6RE	19 - 1976/188/	6.33H	R=	20.2RE
10 - 1976/187/	9.42H	R=	7.2RE	20 - 1976/188/	7.83H	R=	20.3RE

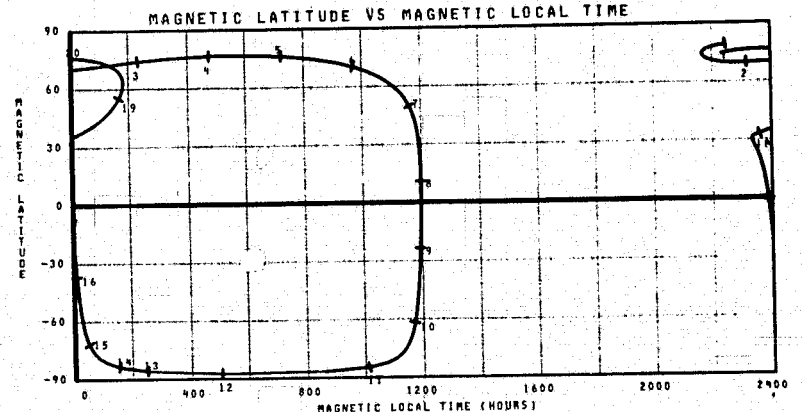
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/186/ 7.00H TO 1976/188/ 8.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

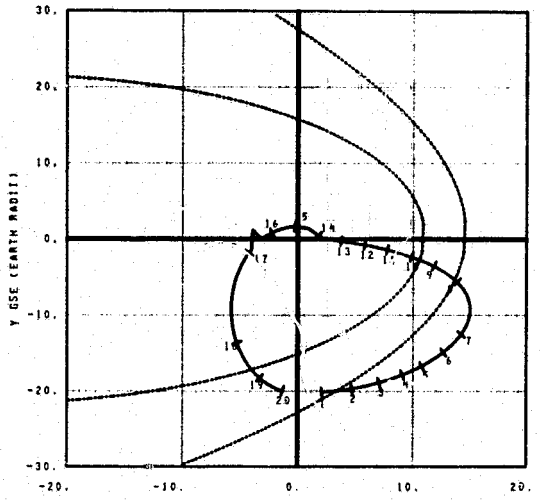
1 - 1976/186/	7.17H	R=	20.1RE	8 - 1976/187/	9.42H	R=	3.1RE	15 - 1976/187/	6.92H	R=	1.8RE
2 - 1976/186/	14.67H	R=	19.2RE	9 - 1976/187/	9.92H	R=	2.1RE	16 - 1976/187/	6.83H	R=	2.3RE
3 - 1976/186/	18.83H	R=	15.9RE	10 - 1976/187/	6.22H	R=	1.7RE	17 - 1976/187/	7.58H	R=	3.9RE
4 - 1976/186/	20.83H	R=	14.4RE	11 - 1976/187/	6.17H	R=	1.7RE	18 - 1976/187/	14.58H	R=	13.3RE
5 - 1976/186/	22.58H	R=	13.0RE	12 - 1976/187/	6.48H	R=	1.7RE	19 - 1976/187/	22.83H	R=	18.3RE
6 - 1976/187/	0.58H	R=	10.9RE	13 - 1976/187/	6.42H	R=	1.7RE	20 - 1976/188/	5.33H	R=	20.1RE
7 - 1976/187/	3.58H	R=	6.6RE	14 - 1976/187/	6.43H	R=	1.7RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/186 / 7.00H TO1976/188 / 8.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/188/	8.33H	LAT=	81.9	11 - 1976/189/	6.00H	LAT=	44.5
2 - 1976/188/	9.33H	LAT=	81.7	12 - 1976/189/	7.25H	LAT=	32.6
3 - 1976/188/	10.33H	LAT=	81.3	13 - 1976/189/	8.33H	LAT=	10.8
4 - 1976/188/	11.33H	LAT=	80.8	14 - 1976/189/	9.33H	LAT=	-59.1
5 - 1976/188/	12.33H	LAT=	80.3	15 - 1976/189/	9.50H	LAT=	-78.5
6 - 1976/188/	13.83H	LAT=	79.2	16 - 1976/189/	10.10H	LAT=	-19.8
7 - 1976/188/	15.83H	LAT=	77.4	17 - 1976/189/	11.17H	LAT=	22.9
8 - 1976/188/	23.33H	LAT=	67.4	18 - 1976/189/	19.33H	LAT=	67.6
9 - 1976/189/	2.33H	LAT=	60.9	19 - 1976/190/	2.17H	LAT=	77.2
10 - 1976/189/	4.33H	LAT=	53.6	20 - 1976/190/	7.67H	LAT=	81.3

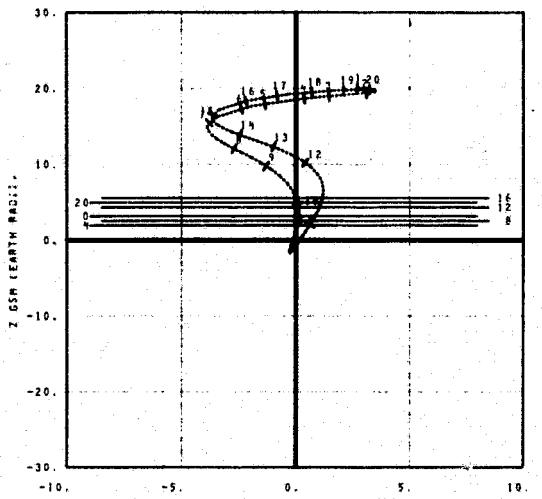
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/188/ 8.00H TO 1976/190/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/188/	8.33H	R=	20.3R_E	11 - 1976/189/	11.33H	R=	4.9R_E
2 - 1976/188/	12.83H	R=	19.0R_E	12 - 1976/189/	16.17H	R=	11.0R_E
3 - 1976/188/	14.83H	R=	19.3R_E	13 - 1976/189/	18.00H	R=	13.4R_E
4 - 1976/188/	15.83H	R=	19.0R_E	14 - 1976/189/	19.83H	R=	15.0R_E
5 - 1976/188/	17.33H	R=	18.4R_E	15 - 1976/189/	23.67H	R=	17.4R_E
6 - 1976/188/	18.33H	R=	18.0R_E	16 - 1976/190/	2.67H	R=	18.8R_E
7 - 1976/188/	20.83H	R=	16.7R_E	17 - 1976/190/	4.17H	R=	19.3R_E
8 - 1976/189/	1.00H	R=	13.6R_E	18 - 1976/190/	5.67H	R=	19.6R_E
9 - 1976/189/	3.17H	R=	11.5R_E	19 - 1976/190/	7.17H	R=	19.9R_E
10 - 1976/189/	6.42H	R=	7.2R_E	20 - 1976/190/	8.67H	R=	20.1R_E

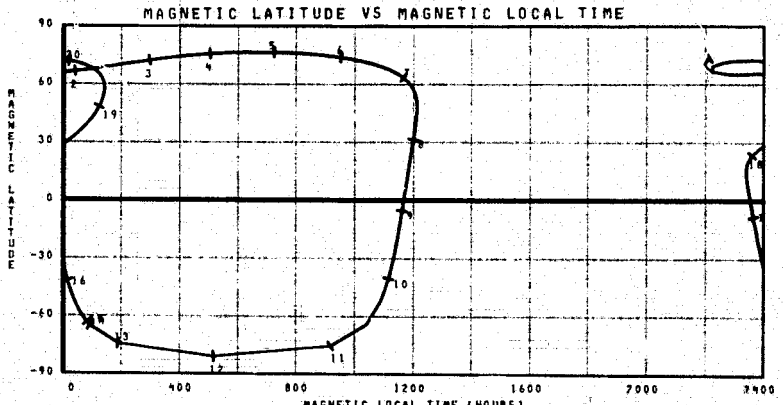
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/188/ 8.00H TO 1976/190/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

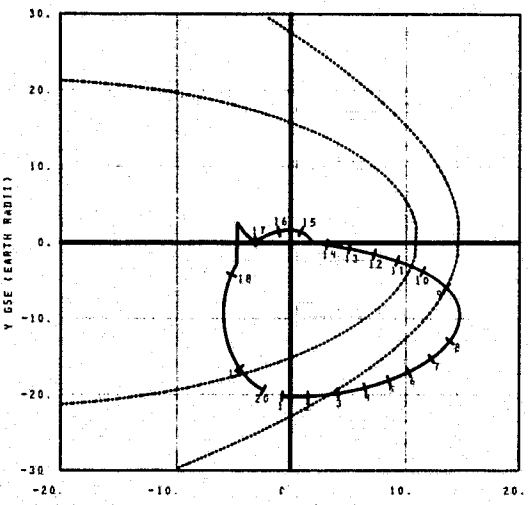
1 - 1976/188/	8.33H	R=	20.3R_E	8 - 1976/189/	8.17H	R=	9.1R_E	15 - 1976/189/	9.83H	R=	2.0R_E
2 - 1976/188/	16.83H	R=	18.4R_E	9 - 1976/189/	9.00H	R=	2.5R_E	16 - 1976/189/	10.00H	R=	2.4R_E
3 - 1976/188/	20.33H	R=	16.9R_E	10 - 1976/189/	9.33H	R=	1.8R_E	17 - 1976/189/	10.83H	R=	3.9R_E
4 - 1976/188/	22.33H	R=	15.7R_E	11 - 1976/189/	9.50H	R=	1.7R_E	18 - 1976/189/	15.00H	R=	10.5R_E
5 - 1976/188/	24.00H	R=	14.5R_E	12 - 1976/189/	9.67H	R=	1.7R_E	19 - 1976/189/	22.17H	R=	16.4R_E
6 - 1976/189/	1.83H	R=	12.9R_E	13 - 1976/189/	9.75H	R=	1.8R_E	20 - 1976/190/	9.67H	R=	19.4R_E
7 - 1976/189/	6.83H	R=	9.5R_E	14 - 1976/189/	9.83H	R=	1.9R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/188 / 8.00H TO1976/190 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/190/	9.17H	LAT=	81.8	11 -	1976/191/	8.00H	LAT=	51.6
2 -	1976/190/	11.67H	LAT=	81.9	12 -	1976/191/	9.50H	LAT=	42.3
3 -	1976/190/	12.67H	LAT=	81.7	13 -	1976/191/	10.83H	LAT=	27.1
4 -	1976/190/	13.67H	LAT=	81.3	14 -	1976/191/	11.83H	LAT=	-0.3
5 -	1976/190/	14.67H	LAT=	80.8	15 -	1976/191/	12.72H	LAT=	-81.1
6 -	1976/190/	15.67H	LAT=	80.2	16 -	1976/191/	12.98H	LAT=	-53.2
7 -	1976/190/	17.17H	LAT=	79.1	17 -	1976/191/	13.65H	LAT=	0.9
8 -	1976/190/	19.17H	LAT=	77.9	18 -	1976/191/	15.50H	LAT=	38.9
9 -	1976/191/	2.83H	LAT=	66.9	19 -	1976/192/	2.17H	LAT=	73.9
10 -	1976/191/	5.83H	LAT=	59.7	20 -	1976/192/	8.33H	LAT=	79.8

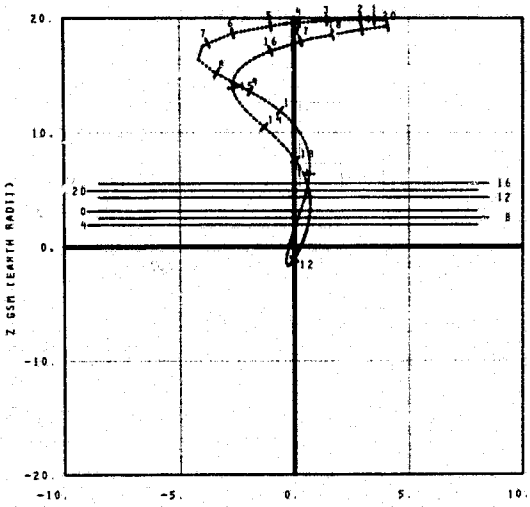
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/190/ 9.00H TO 1976/192/10.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/190/	9.17H	R=	20.2R_E	11 -	1976/191/	8.75H	R=	8.6R_E
2 -	1976/190/	11.67H	R=	20.1R_E	12 -	1976/191/	13.22H	R=	2.2R_E
3 -	1976/190/	13.17H	R=	19.9R_E	13 -	1976/191/	17.50H	R=	9.6R_E
4 -	1976/190/	14.17H	R=	19.7R_E	14 -	1976/191/	19.67H	R=	12.1R_E
5 -	1976/190/	17.17H	R=	19.5R_E	15 -	1976/191/	23.17H	R=	15.1R_E
6 -	1976/190/	18.67H	R=	19.1R_E	16 -	1976/192/	3.33H	R=	17.7R_E
7 -	1976/190/	20.17H	R=	18.6R_E	17 -	1976/192/	4.83H	R=	18.9R_E
8 -	1976/191/	0.67H	R=	14.3R_E	18 -	1976/192/	6.33H	R=	18.9R_E
9 -	1976/191/	2.83H	R=	14.0R_E	19 -	1976/192/	7.83H	R=	19.4R_E
10 -	1976/191/	4.67H	R=	13.2R_E	20 -	1976/192/	9.83H	R=	19.8R_E

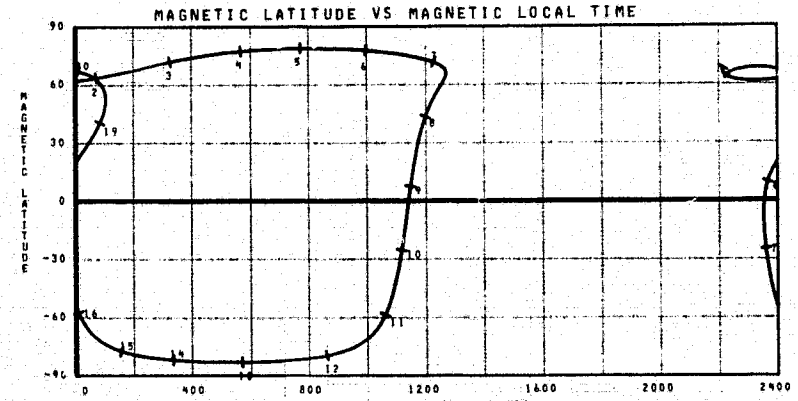
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/190/ 9.00H TO 1976/192/10.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

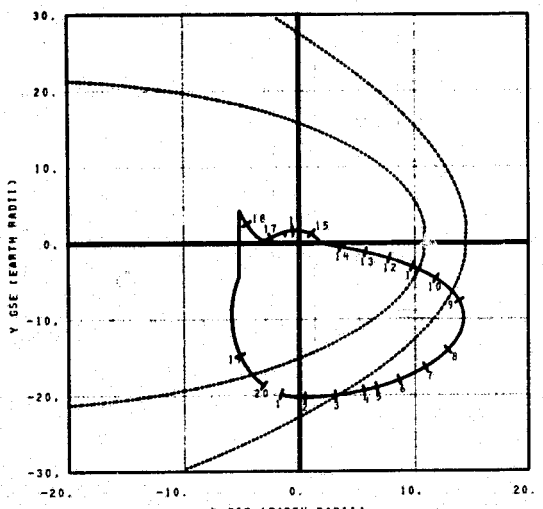
1 -	1976/190/	9.17H	R=	20.2R_E	8 -	1976/191/	11.25H	R=	4.3R_E
2 -	1976/190/	11.17H	R=	19.9R_E	9 -	1976/191/	12.17H	R=	2.4R_E
3 -	1976/190/	12.67H	R=	17.9R_E	10 -	1976/191/	12.58H	R=	1.9R_E
4 -	1976/191/	0.17H	R=	16.6R_E	11 -	1976/191/	12.73H	R=	1.7R_E
5 -	1976/191/	1.67H	R=	15.6R_E	12 -	1976/191/	12.88H	R=	1.7R_E
6 -	1976/191/	3.33H	R=	14.4R_E	13 -	1976/191/	12.93H	R=	1.8R_E
7 -	1976/191/	6.33H	R=	11.9R_E	14 -	1976/191/	12.97H	R=	1.8R_E
					15 -	1976/191/	13.02H	R=	1.9R_E
					16 -	1976/191/	13.25H	R=	3.8R_E
					17 -	1976/191/	13.88H	R=	5.4R_E
					18 -	1976/191/	14.00H	R=	7.8R_E
					19 -	1976/191/	21.67H	R=	13.9R_E
					20 -	1976/192/	4.33H	R=	18.1R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/190 / 9.00H TO1976/192 /10.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/192/ 10.33H	LAT=	81.0	11 - 1976/193/ 10.67H	LAT=	59.1
2 - 1976/192/ 14.83H	LAT=	81.9	12 - 1976/193/ 12.33H	LAT=	45.2
3 - 1976/192/ 15.83H	LAT=	81.7	13 - 1976/193/ 13.67H	LAT=	32.6
4 - 1976/192/ 16.83H	LAT=	81.4	14 - 1976/193/ 14.83H	LAT=	8.0
5 - 1976/192/ 17.33H	LAT=	81.1	15 - 1976/193/ 20.33H	LAT=	-86.5
6 - 1976/192/ 18.33H	LAT=	80.6	16 - 1976/193/ 16.00H	LAT=	-67.8
7 - 1976/192/ 19.83H	LAT=	79.6	17 - 1976/193/ 16.62H	LAT=	-13.0
8 - 1976/192/ 21.83H	LAT=	78.0	18 - 1976/193/ 17.92H	LAT=	28.8
9 - 1976/193/ 0.50H	LAT=	69.7	19 - 1976/194/ 3.00H	LAT=	69.7
10 - 1976/193/ 8.33H	LAT=	61.8	20 - 1976/194/ 9.67H	LAT=	78.1

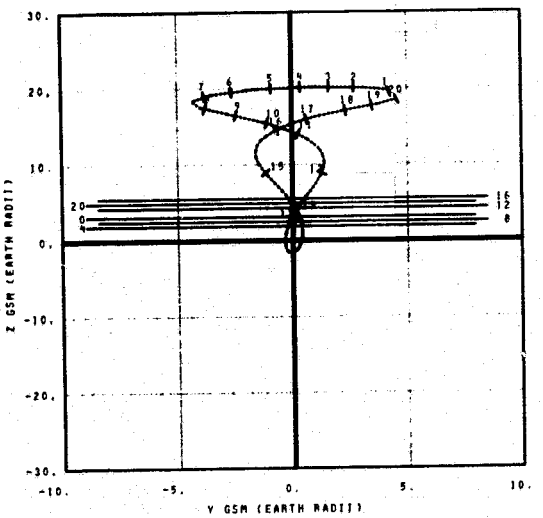
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/192/10.00H TO 1976/194/11.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/192/ 10.33H	R=	19.9RE	11 - 1976/193/ 5.83H	R=	14.9RE
2 - 1976/192/ 14.83H	R=	20.3RE	12 - 1976/193/ 10.33H	R=	10.6RE
3 - 1976/192/ 15.83H	R=	20.2RE	13 - 1976/193/ 13.83H	R=	9.5RE
4 - 1976/192/ 16.83H	R=	20.2RE	14 - 1976/193/ 18.67H	R=	6.6RE
5 - 1976/192/ 17.33H	R=	20.1RE	15 - 1976/193/ 21.67H	R=	10.0RE
6 - 1976/192/ 18.83H	R=	19.9RE	16 - 1976/194/ 2.83H	R=	15.5RE
7 - 1976/192/ 20.33H	R=	19.5RE	17 - 1976/194/ 4.67H	R=	16.7RE
8 - 1976/193/ 0.33H	R=	18.2RE	18 - 1976/194/ 6.67H	R=	17.7RE
9 - 1976/193/ 2.33H	R=	17.2RE	19 - 1976/194/ 8.17H	R=	18.4RE
10 - 1976/193/ 4.00H	R=	16.2RE	20 - 1976/194/ 10.67H	R=	19.3RE

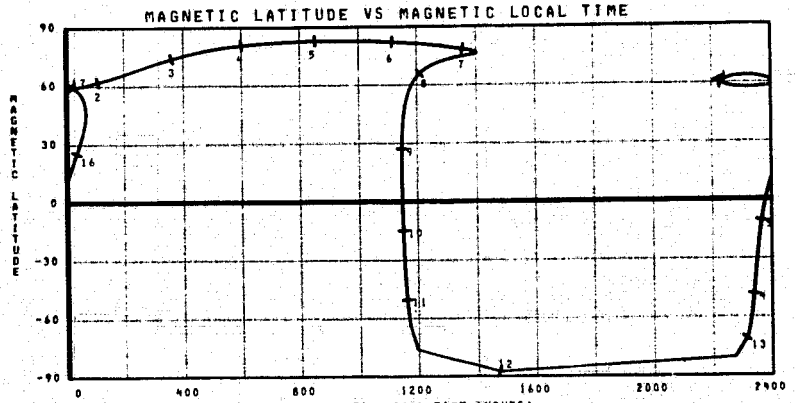
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/192/10.00H TO 1976/194/11.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

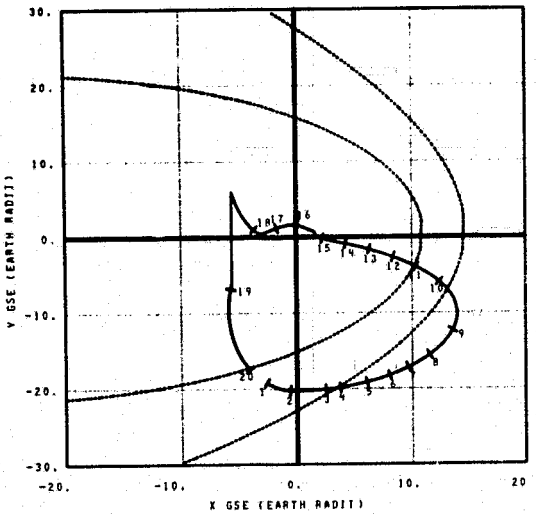
1 - 1976/192/ 10.33H	R=	19.9RE	8 - 1976/193/ 13.50H	R=	6.1RE	15 - 1976/193/ 17.50H	R=	4.6RE
2 - 1976/192/ 18.83H	R=	19.9RE	9 - 1976/193/ 15.17H	R=	2.9RE	16 - 1976/193/ 20.75H	R=	9.6RE
3 - 1976/192/ 20.33H	R=	18.6RE	10 - 1976/193/ 15.67H	R=	1.9RE	17 - 1976/194/ 3.33H	R=	19.0RE
4 - 1976/193/ 1.83H	R=	17.4RE	11 - 1976/193/ 15.92H	R=	1.7RE			
5 - 1976/193/ 3.33H	R=	16.6RE	12 - 1976/193/ 16.17H	R=	1.8RE			
6 - 1976/193/ 4.83H	R=	15.6RE	13 - 1976/193/ 16.33H	R=	2.1RE			
7 - 1976/193/ 7.50H	R=	13.9RE	14 - 1976/193/ 16.58H	R=	2.6RE			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/192/10.00H TO1976/194/11.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/199/ 11.17H	LAT= 79.4	11 - 1976/195/ 13.17H	LAT= 56.9
2 - 1976/199/ 16.67H	LAT= 81.9	12 - 1976/195/ 15.00H	LAT= 48.7
3 - 1976/199/ 19.17H	LAT= 81.7	13 - 1976/195/ 16.50H	LAT= 37.1
4 - 1976/199/ 19.67H	LAT= 81.5	14 - 1976/195/ 17.67H	LAT= 18.9
5 - 1976/199/ 20.67H	LAT= 81.1	15 - 1976/195/ 18.67H	LAT= -26.7
6 - 1976/199/ 21.67H	LAT= 80.6	16 - 1976/195/ 19.17H	LAT= -81.0
7 - 1976/199/ 22.67H	LAT= 79.9	17 - 1976/195/ 19.50H	LAT= -32.6
8 - 1976/195/ 0.17H	LAT= 78.8	18 - 1976/195/ 20.42H	LAT= 13.2
9 - 1976/195/ 3.17H	LAT= 75.9	19 - 1976/195/ 23.92H	LAT= 49.8
10 - 1976/195/ 10.50H	LAT= 64.4	20 - 1976/196/ 10.33H	LAT= 75.4

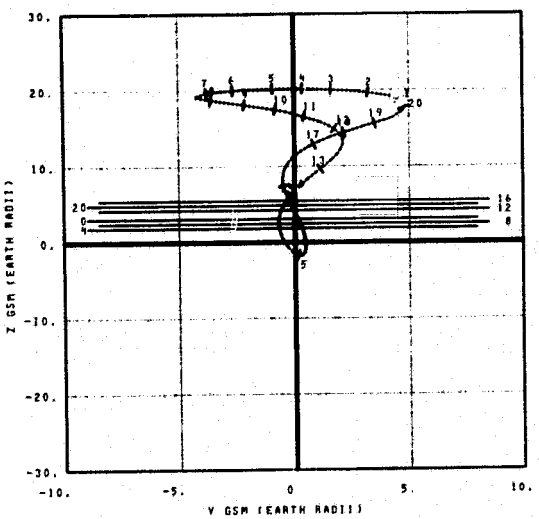
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/199/11.00H TO 1976/196/12.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/199/ 11.17H	R= 19.9RE	11 - 1976/195/ 5.67H	R= 17.1RE
2 - 1976/199/ 16.17H	R= 20.0RE	12 - 1976/195/ 7.83H	R= 15.8RE
3 - 1976/199/ 19.67H	R= 20.2RE	13 - 1976/195/ 13.00H	R= 11.3RE
4 - 1976/199/ 16.67H	R= 20.2RE	14 - 1976/195/ 15.33H	R= 6.3RE
5 - 1976/199/ 17.67H	R= 20.3RE	15 - 1976/195/ 19.08H	R= 1.7RE
6 - 1976/199/ 19.17H	R= 20.2RE	16 - 1976/195/ 23.03H	R= 9.5RE
7 - 1976/199/ 20.67H	R= 20.1RE	17 - 1976/196/ 4.33H	R= 14.2RE
8 - 1976/195/ 0.67H	R= 19.2RE	18 - 1976/196/ 6.17H	R= 15.6RE
9 - 1976/195/ 2.67H	R= 18.5RE	19 - 1976/196/ 8.00H	R= 16.7RE
10 - 1976/195/ 9.17H	R= 17.9RE	20 - 1976/196/ 11.83H	R= 18.6RE

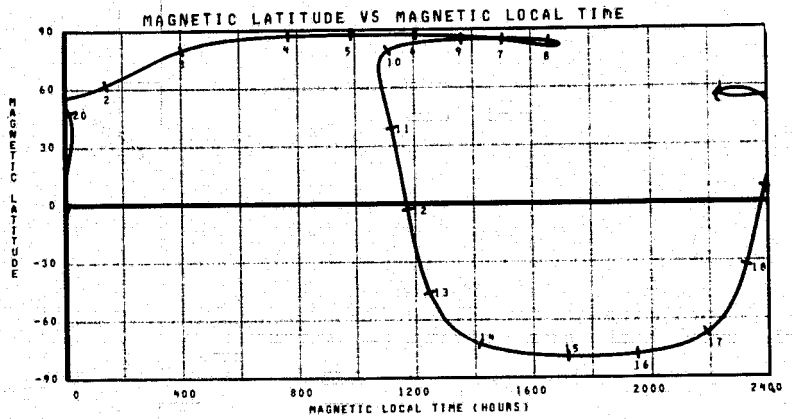
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/199/11.00H TO 1976/196/12.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

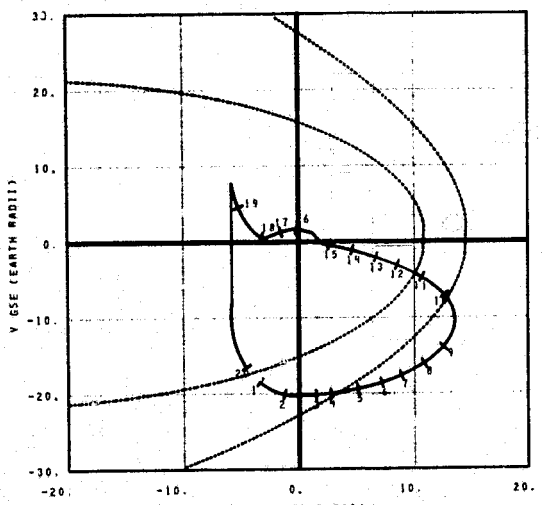
1 - 1976/199/ 11.17H	R= 19.9RE	8 - 1976/195/ 12.83H	R= 11.5RE	15 - 1976/195/ 19.25H	R= 1.8RE
2 - 1976/199/ 20.17H	R= 20.1RE	9 - 1976/195/ 14.33H	R= 9.7RE	16 - 1976/195/ 19.50H	R= 1.9RE
3 - 1976/195/ 1.67H	R= 18.9RE	10 - 1976/195/ 15.67H	R= 7.8RE	17 - 1976/195/ 19.83H	R= 2.0RE
4 - 1976/195/ 4.17H	R= 17.9RE	11 - 1976/195/ 18.00H	R= 3.9RE	18 - 1976/195/ 19.98H	R= 2.1RE
5 - 1976/195/ 6.67H	R= 17.6RE	12 - 1976/195/ 18.75H	R= 2.5RE	19 - 1976/195/ 21.42H	R= 5.0RE
6 - 1976/195/ 9.17H	R= 17.9RE	13 - 1976/195/ 19.08H	R= 1.7RE	20 - 1976/196/ 2.00H	R= 12.0RE
7 - 1976/195/ 6.67H	R= 16.9RE	14 - 1976/195/ 19.27H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/199/11.00H TO1976/196/12.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/196/	12.33 H	LAT=	77.6	11 -	1976/197/	15.83 H	LAT=	58.8
2 -	1976/196/	18.33 H	LAT=	81.6	12 -	1976/197/	18.00 H	LAT=	49.9
3 -	1976/196/	22.33 H	LAT=	81.7	13 -	1976/197/	19.42 H	LAT=	40.1
4 -	1976/196/	22.83 H	LAT=	81.6	14 -	1976/197/	20.67 H	LAT=	23.5
5 -	1976/196/	23.83 H	LAT=	81.2	15 -	1976/197/	21.67 H	LAT=	-11.2
6 -	1976/197/	0.83 H	LAT=	80.6	16 -	1976/197/	22.42 H	LAT=	-28.8
7 -	1976/197/	1.83 H	LAT=	80.0	17 -	1976/197/	22.75 H	LAT=	-36.9
8 -	1976/197/	3.33 H	LAT=	78.9	18 -	1976/197/	23.38 H	LAT=	-4.8
9 -	1976/197/	5.33 H	LAT=	77.0	19 -	1976/198/	1.33 H	LAT=	48.6
10 -	1976/197/	12.83 H	LAT=	66.9	20 -	1976/198/	12.00 H	LAT=	73.5

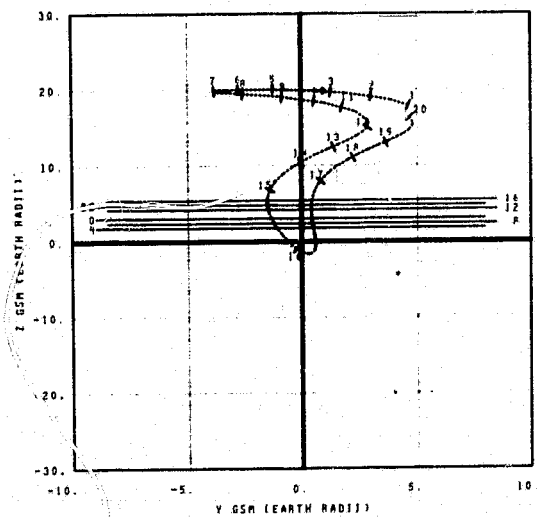
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/196/12.00H TO 1976/198/13.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/196/	12.33 H	R=	18.8 R_E	11 -	1976/197/	6.83 H	R=	18.1 R_E
2 -	1976/196/	14.83 H	R=	19.5 R_E	12 -	1976/197/	10.83 H	R=	15.9 R_E
3 -	1976/196/	16.33 H	R=	19.9 R_E	13 -	1976/197/	13.83 H	R=	13.6 R_E
4 -	1976/196/	17.33 H	R=	20.0 R_E	14 -	1976/197/	15.67 H	R=	11.8 R_E
5 -	1976/196/	18.33 H	R=	20.1 R_E	15 -	1976/197/	18.17 H	R=	8.8 R_E
6 -	1976/196/	19.83 H	R=	20.2 R_E	16 -	1976/197/	21.83 H	R=	2.3 R_E
7 -	1976/196/	21.83 H	R=	20.2 R_E	17 -	1976/198/	3.42 H	R=	10.0 R_E
8 -	1976/197/	1.83 H	R=	19.7 R_E	18 -	1976/198/	6.00 H	R=	12.8 R_E
9 -	1976/197/	3.83 H	R=	19.2 R_E	19 -	1976/198/	8.17 H	R=	14.7 R_E
10 -	1976/197/	5.33 H	R=	18.7 R_E	20 -	1976/198/	12.67 H	R=	17.5 R_E

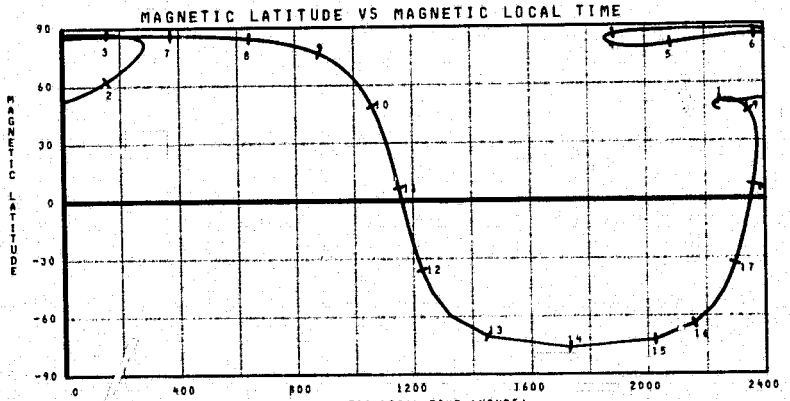
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/196/12.00H TO 1976/198/13.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

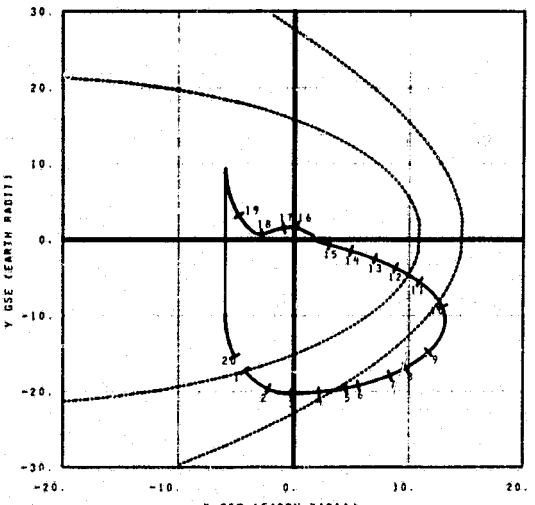
1 -	1976/196/	12.33 H	R=	18.8 R_E	8 -	1976/197/	17.17 H	R=	18.1 R_E
2 -	1976/196/	21.33 H	R=	20.3 R_E	9 -	1976/197/	18.50 H	R=	16.4 R_E
3 -	1976/197/	0.33 H	R=	19.1 R_E	10 -	1976/197/	20.67 H	R=	9.8 R_E
4 -	1976/197/	6.33 H	R=	18.3 R_E	11 -	1976/197/	21.75 H	R=	2.9 R_E
5 -	1976/197/	13.33 H	R=	19.8 R_E	12 -	1976/197/	22.17 H	R=	1.8 R_E
6 -	1976/197/	15.50 H	R=	12.8 R_E	13 -	1976/197/	22.42 H	R=	1.7 R_E
7 -	1976/197/	16.50 H	R=	10.9 R_E	14 -	1976/197/	22.58 H	R=	1.7 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/196/12.00H TO1976/198/13.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/198/ 13.17H	LAT= 79.9	11 - 1976/199/ 10.50H	LAT= 60.5
2 - 1976/198/ 19.17H	LAT= 80.4	12 - 1976/199/ 20.83H	LAT= 51.9
3 - 1976/199/ 0.67H	LAT= 81.9	13 - 1976/199/ 22.33H	LAT= 42.7
4 - 1976/199/ 2.17H	LAT= 81.5	14 - 1976/199/ 23.67H	LAT= 27.9
5 - 1976/199/ 3.17H	LAT= 81.1	15 - 1976/200/ 0.67H	LAT= 0.0
6 - 1976/199/ 3.67H	LAT= 80.9	16 - 1976/200/ 1.50H	LAT= -81.9
7 - 1976/199/ 5.17H	LAT= 80.0	17 - 1976/200/ 1.80H	LAT= -55.7
8 - 1976/199/ 6.17H	LAT= 79.2	18 - 1976/200/ 2.40H	LAT= -9.0
9 - 1976/199/ 8.17H	LAT= 77.5	19 - 1976/200/ 3.83H	LAT= 32.8
10 - 1976/199/ 14.50H	LAT= 69.3	20 - 1976/200/ 13.50H	LAT= 70.9

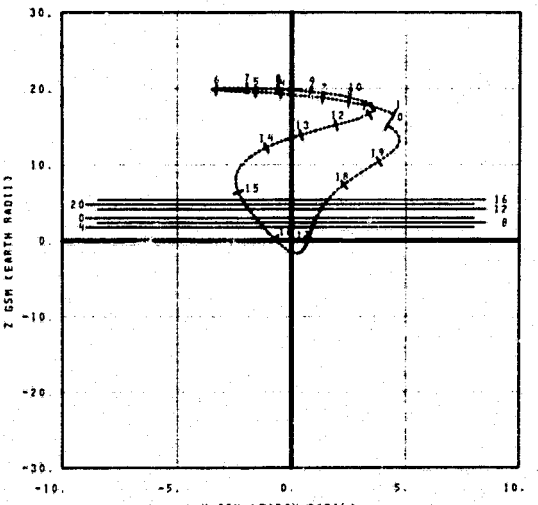
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/198/13.00H TO 1976/200/14.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/198/ 13.17H	R= 17.8R_E	11 - 1976/199/ 11.67H	R= 12.3R_E
2 - 1976/198/ 15.67H	R= 18.8R_E	12 - 1976/199/ 14.00H	R= 15.9R_E
3 - 1976/198/ 16.67H	R= 19.2R_E	13 - 1976/199/ 15.67H	R= 14.8R_E
4 - 1976/198/ 18.17H	R= 19.6R_E	14 - 1976/199/ 17 33H	R= 13.9R_E
5 - 1976/198/ 19.17H	R= 19.8R_E	15 - 1976/199/ 21.50H	R= 8.7R_E
6 - 1976/198/ 21.67H	R= 20.2R_E	16 - 1976/200/ 0.58H	R= 3.3R_E
7 - 1976/199/ 2.17H	R= 20.2R_E	17 - 1976/200/ 2.63H	R= 3.9R_E
8 - 1976/199/ 3.67H	R= 20.0R_E	18 - 1976/200/ 6.92H	R= 9.7R_E
9 - 1976/199/ 5.17H	R= 19.7R_E	19 - 1976/200/ 9.08H	R= 12.6R_E
10 - 1976/199/ 7.17H	R= 19.2R_E	20 - 1976/200/ 14.00H	R= 16.5R_E

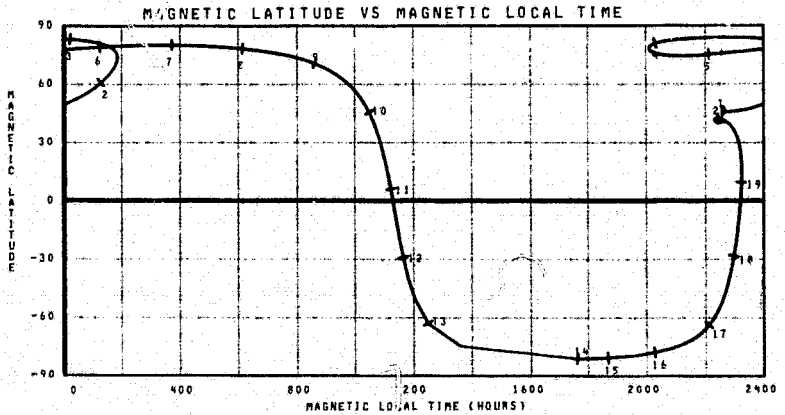
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/198/13.00H TO 1976/200/14.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

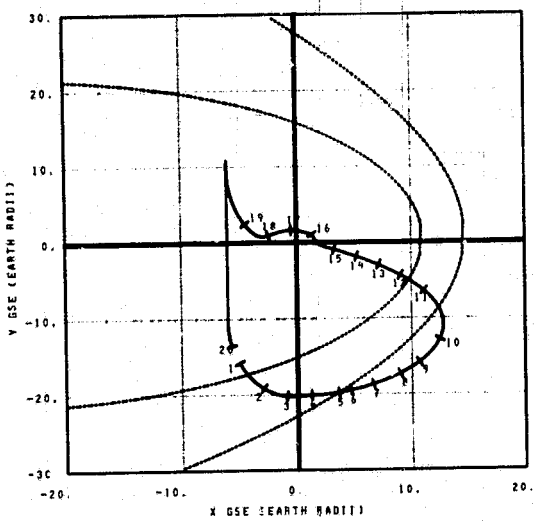
1 - 1976/198/ 13.17H	R= 17.8R_E	8 - 1976/199/ 19.50H	R= 11.8R_E	15 - 1976/200/ 1.68H	R= 1.7R_E
2 - 1976/198/ 21.67H	R= 20.2R_E	9 - 1976/199/ 21.17H	R= 9.1R_E	16 - 1976/200/ 1.72H	R= 1.7R_E
3 - 1976/199/ 4.17H	R= 19.9R_E	10 - 1976/199/ 23.58H	R= 5.3R_E	17 - 1976/200/ 1.83H	R= 1.9R_E
4 - 1976/199/ 7.17H	R= 19.2R_E	11 - 1976/200/ 0.83H	R= 2.6R_E	18 - 1976/200/ 2.20H	R= 2.9R_E
5 - 1976/199/ 15.00H	R= 15.9R_E	12 - 1976/200/ 1.25H	R= 2.0R_E	19 - 1976/200/ 5.13H	R= 9.9R_E
6 - 1976/199/ 17.00H	R= 13.7R_E	13 - 1976/200/ 1.50H	R= 1.7R_E	20 - 1976/200/ 8.67H	R= 12.8R_E
7 - 1976/199/ 18.33H	R= 12.4R_E	14 - 1976/200/ 1.67H	R= 1.7R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/198/13.00H TO1976/200/14.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/200/ 14.17H	LAT=	71.9	11 - 1976/2/1/ 21.17H	LAT=	62.1
2 - 1976/200/ 20.83H	LAT=	79.3	12 - 1976/201/ 23.67H	LAT=	53.[illegible]
3 - 1976/201/ 2.33H	LAT=	81.9	13 - 1976/202/ 1.33H	LAT=	44.[illegible]
4 - 1976/201/ 5.33H	LAT=	81.6	14 - 1976/202/ 2.67H	LAT=	30.1
5 - 1976/201/ 6.33H	LAT=	81.2	15 - 1976/202/ 3.75H	LAT=	5.[illegible]
6 - 1976/201/ 6.83H	LAT=	80.9	16 - 1976/202/ 4.75H	LAT=	-80.1
7 - 1976/201/ 7.83H	LAT=	80.4	17 - 1976/202/ 4.92H	LAT=	-68.9
8 - 1976/201/ 9.33H	LAT=	79.3	18 - 1976/202/ 5.67H	LAT=	-12.3
9 - 1976/201/ 10.83H	LAT=	78.0	19 - 1976/202/ 6.67H	LAT=	27.1
10 - 1976/201/ 13.83H	LAT=	74.9	20 - 1976/202/ 14.67H	LAT=	67.3

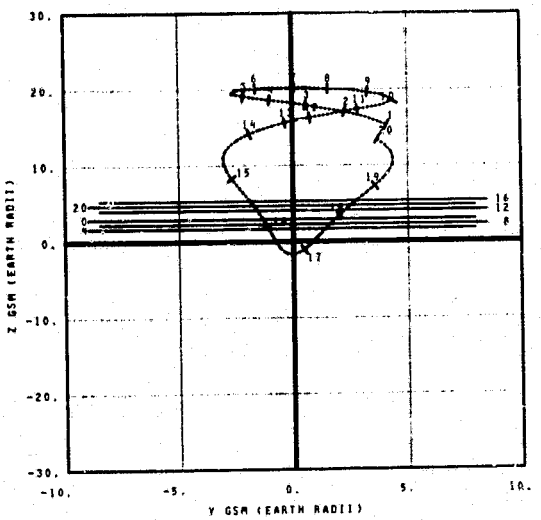
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 197[illegible]/200/14.00H TO 1976/202/15.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/200/ 14.17H	R= 16.6R_E	11 - 1976/201/ 13.83H	R= 17.9R_E
2 - 1976/200/ 16.33H	R= 17.6R_E	12 - 1976/201/ 15.83H	R= 16.8R_E
3 - 1976/200/ 17.83H	R= 18.9R_E	13 - 1976/201/ 16.83H	R= 16.8R_E
4 - 1976/200/ 19.33H	R= 19.0R_E	14 - 1976/201/ 18.50H	R= 15.0R_E
5 - 1976/200/ 20.83H	R= 19.9R_E	15 - 1976/201/ 23.50H	R= 10.2R_E
6 - 1976/201/ 1.83H	R= 20.2R_E	16 - 1976/202/ 3.58H	R= 4.8R_E
7 - 1976/201/ 3.83H	R= 20.3R_E	17 - 1976/202/ 5.33H	R= 2.4R_E
8 - 1976/201/ 5.33H	R= 20.2R_E	18 - 1976/202/ 7.42H	R= 6.4R_E
9 - 1976/201/ 7.33H	R= 19.9R_E	19 - 1976/202/ 9.92H	R= 10.1R_E
10 - 1976/201/ 10.83H	R= 19.[illegible]R_E	20 - 1976/202/ 15.00H	R= 15.0R_E

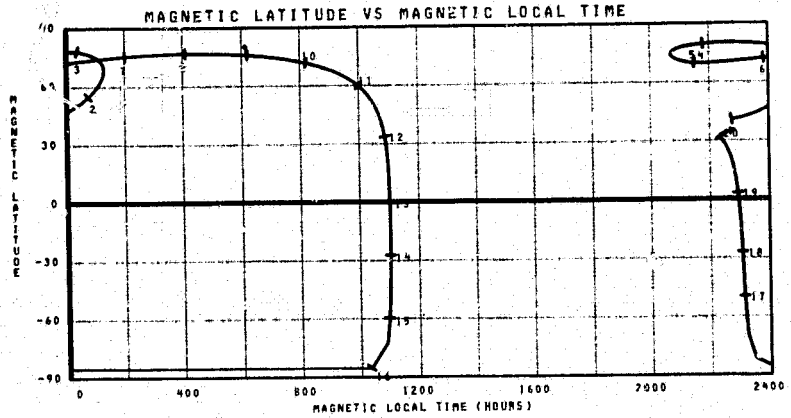
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/200/14.00H TO 1976/202/15.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

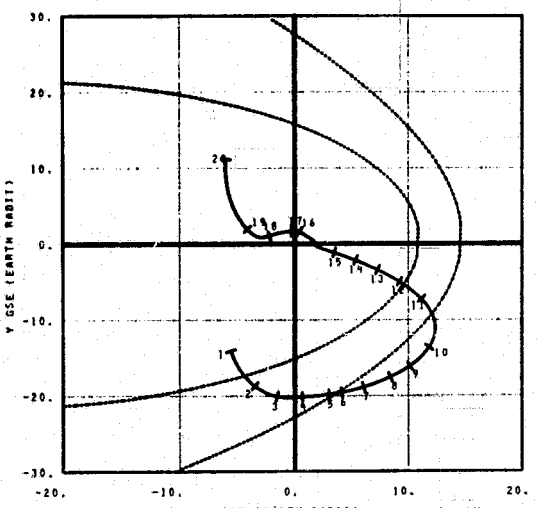
1 - 1976/200/ 14.17H	R= 16.6R_E	8 - 1976/201/ 20.06H	R= 13.8R_E	15 - 1976/202/ 4.67H	R= 1.7R_E
2 - 1976/200/ 20.83H	R= 19.4R_E	9 - 1976/201/ 21.33H	R= 12.6R_E	16 - 1976/202/ 4.83H	R= 1.7R_E
3 - 1976/201/ 2.33H	R= 20.3R_E	10 - 1976/201/ 22.83H	R= 11.0R_E	17 - 1976/202/ 5.17H	R= 2.1R_E
4 - 1976/201/ 5.83H	R= 20.1R_E	11 - 1976/202/ 1.00H	R= 8.3R_E	18 - 1976/202/ 5.42H	R= 2.6R_E
5 - 1976/201/ 12.33H	R= 18.9R_E	12 - 1976/202/ 3.17H	R= 4.6R_E	19 - 1976/202/ 6.17H	R= 4.1R_E
6 - 1976/201/ 16.33H	R= 16.5R_E	13 - 1976/202/ 4.08H	R= 2.7R_E	20 - 1976/202/ 15.50H	R= 10.0R_E
7 - 1976/201/ 18.50H	R= 15.0R_E	14 - 1976/202/ 4.42H	R= 2.0R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/200 /14.00H TO1976/202 /15.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/202/ 15.17H	LAT=	60.3	11 - 1976/203/ 23.83H	LAT=	63.5
2 - 1976/202/ 22.67H	LAT=	70.1	12 - 1976/204/ 2.50H	LAT=	55.3
3 - 1976/203/ 4.17H	LAT=	81.6	13 - 1976/204/ 4.33H	LAT=	45.9
4 - 1976/203/ 8.67H	LAT=	81.5	14 - 1976/204/ 5.75H	LAT=	32.6
5 - 1976/203/ 9.67H	LAT=	81.1	15 - 1976/204/ 6.83H	LAT=	10.8
6 - 1976/203/ 10.17H	LAT=	80.9	16 - 1976/204/ 8.00H	LAT=	-81.9
7 - 1976/203/ 11.17H	LAT=	80.3	17 - 1976/204/ 8.08H	LAT=	-74.3
8 - 1976/203/ 12.67H	LAT=	79.2	18 - 1976/204/ 8.68H	LAT=	-17.4
9 - 1976/203/ 14.17H	LAT=	78.0	19 - 1976/204/ 9.68H	LAT=	21.7
10 - 1976/203/ 16.67H	LAT=	75.9	20 - 1976/204/ 15.50H	LAT=	61.9

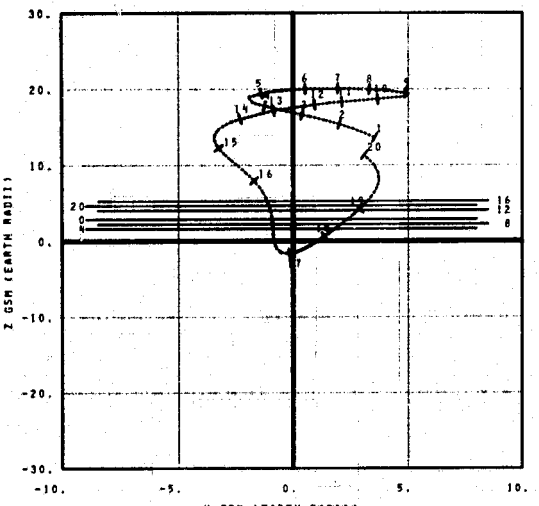
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/202/15.00H TO 1976/209/16.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/202/ 15.17H	R= 15.1R_E	11 - 1976/203/ 15.17H	R= 18.4R_E
2 - 1976/202/ 17.00H	R= 16.4R_E	12 - 1976/203/ 16.17H	R= 18.2R_E
3 - 1976/202/ 18.67H	R= 17.3R_E	13 - 1976/203/ 17.67H	R= 17.5R_E
4 - 1976/202/ 20.67H	R= 18.3R_E	14 - 1976/203/ 19.17H	R= 16.7R_E
5 - 1976/203/ 1.17H	R= 19.7R_E	15 - 1976/203/ 23.50H	R= 13.6R_E
6 - 1976/203/ 3.67H	R= 20.1R_E	16 - 1976/204/ 3.17H	R= 9.7R_E
7 - 1976/203/ 5.17H	R= 20.2R_E	17 - 1976/204/ 8.17H	R= 1.8R_E
8 - 1976/203/ 6.67H	R= 20.3R_E	18 - 1976/204/ 9.37H	R= 4.1R_E
9 - 1976/203/ 9.17H	R= 20.1R_E	19 - 1976/204/ 11.25H	R= 7.5R_E
10 - 1976/203/ 13.67H	R= 19.2R_E	20 - 1976/204/ 16.00H	R= 13.1R_E

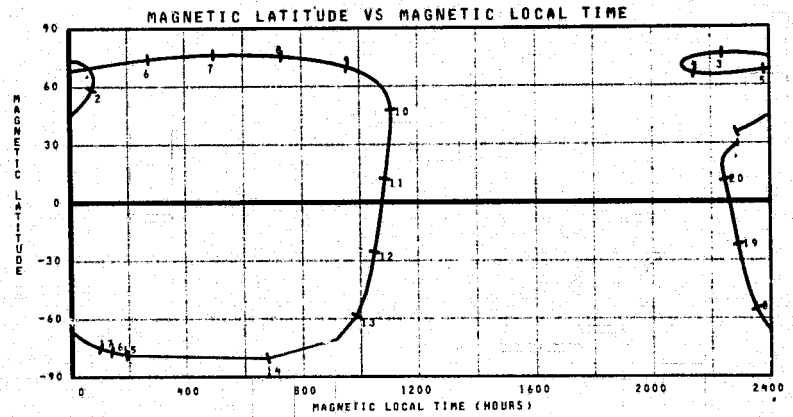
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/202/15.00H TO 1976/209/16.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

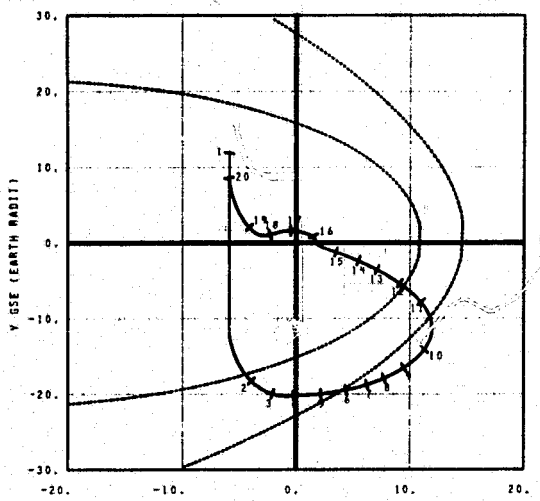
1 - 1976/202/ 15.17H	R= 15.1R_E	8 - 1976/203/ 23.67H	R= 13.4R_E	15 - 1976/204/ 8.17H	R= 1.8R_E
2 - 1976/202/ 22.67H	R= 19.0R_E	9 - 1976/204/ 1.83H	R= 11.3R_E	16 - 1976/204/ 8.18H	R= 1.8R_E
3 - 1976/203/ 5.17H	R= 20.2R_E	10 - 1976/204/ 5.50H	R= 6.1R_E	17 - 1976/204/ 8.28H	R= 1.8R_E
4 - 1976/203/ 11.67H	R= 19.7R_E	11 - 1976/204/ 7.17H	R= 3.0R_E	18 - 1976/204/ 8.38H	R= 2.1R_E
5 - 1976/203/ 16.67H	R= 18.0R_E	12 - 1976/204/ 7.67H	R= 2.0R_E	19 - 1976/204/ 8.97H	R= 3.8R_E
6 - 1976/203/ 20.17H	R= 16.1R_E	13 - 1976/204/ 7.92H	R= 1.7R_E	20 - 1976/204/ 10.50H	R= 6.4R_E
7 - 1976/203/ 22.00H	R= 14.8R_E	14 - 1976/204/ 8.00H	R= 1.7R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/202/15.00H TO1976/209/16.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/209/ 16.17 H	LAT= 63.6	11 - 1976/206/ 2.83 H	LAT= 64.1
2 - 1976/209/ 0.83 H	LAT= 77.0	12 - 1976/206/ 5.67 H	LAT= 59.6
3 - 1976/205/ 6.33 H	LAT= 81.2	13 - 1976/206/ 7.67 H	LAT= 45.1
4 - 1976/205/ 11.33 H	LAT= 81.7	14 - 1976/206/ 8.92 H	LAT= 33.3
5 - 1976/205/ 12.83 H	LAT= 81.2	15 - 1976/206/ 10.00 H	LAT= 8.8
6 - 1976/205/ 13.83 H	LAT= 80.7	16 - 1976/206/ 11.17 H	LAT= -79.7
7 - 1976/205/ 14.83 H	LAT= 80.1	17 - 1976/206/ 11.33 H	LAT= -68.9
8 - 1976/205/ 15.83 H	LAT= 79.3	18 - 1976/206/ 11.83 H	LAT= -15.9
9 - 1976/205/ 17.33 H	LAT= 78.1	19 - 1976/206/ 12.83 H	LAT= 22.2
10 - 1976/205/ 19.83 H	LAT= 75.5	20 - 1976/206/ 16.67 H	LAT= 55.1

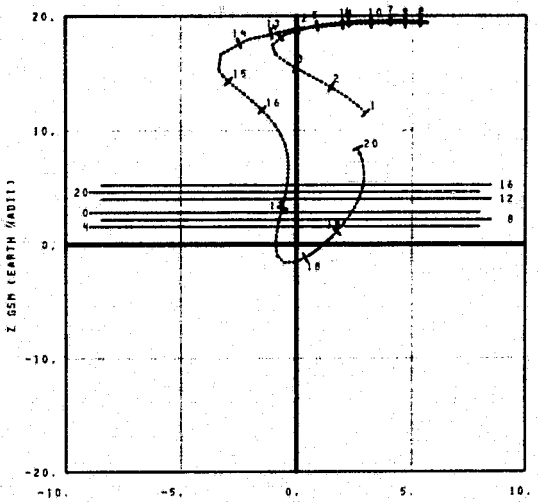
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/209/16.00H TO 1976/206/17.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/209/ 16.17 H	R= 13.3 R_E	11 - 1976/205/ 15.83 H	R= 19.5 R_E
2 - 1976/209/ 18.17 H	R= 14.9 R_E	12 - 1976/205/ 17.33 H	R= 19.0 R_E
3 - 1976/209/ 20.17 H	R= 16.3 R_E	13 - 1976/205/ 18.33 H	R= 18.7 R_E
4 - 1976/205/ 0.83 H	R= 18.7 R_E	14 - 1976/205/ 19.83 H	R= 18.0 R_E
5 - 1976/205/ 3.33 H	R= 19.5 R_E	15 - 1976/206/ 0.67 H	R= 15.2 R_E
6 - 1976/205/ 4.83 H	R= 19.8 R_E	16 - 1976/206/ 3.50 H	R= 12.9 R_E
7 - 1976/205/ 6.83 H	R= 20.1 R_E	17 - 1976/206/ 9.17 H	R= 5.4 R_E
8 - 1976/205/ 9.83 H	R= 20.3 R_E	18 - 1976/206/ 11.75 H	R= 2.4 R_E
9 - 1976/205/ 13.33 H	R= 20.0 R_E	19 - 1976/206/ 12.83 H	R= 4.6 R_E
10 - 1976/205/ 14.83 H	R= 19.7 R_E	20 - 1976/206/ 16.83 H	R= 10.7 R_E

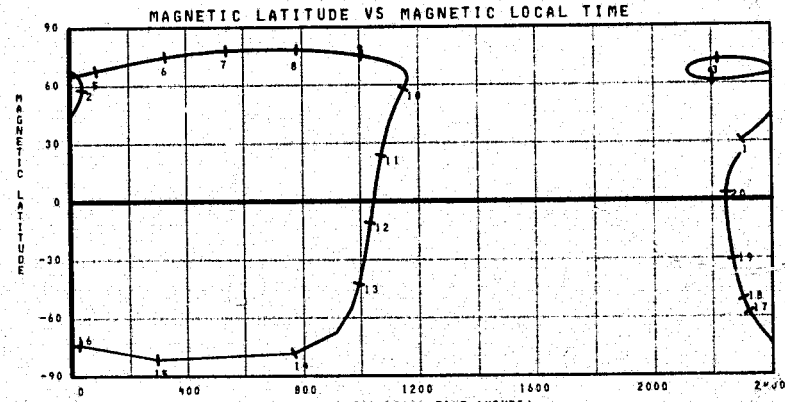
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/209/16.00H TO 1976/206/17.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

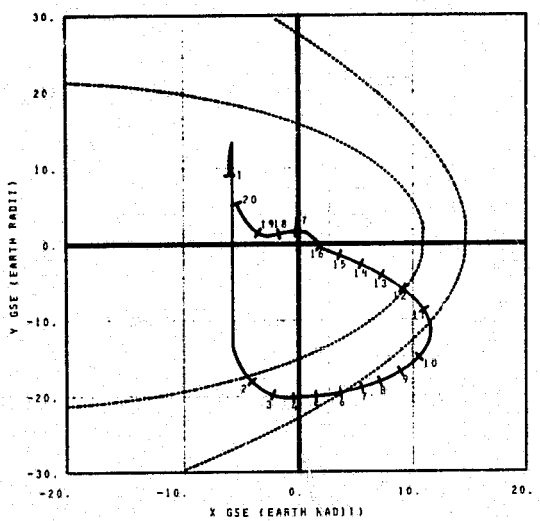
1 - 1976/209/ 16.17 H	R= 13.3 R_E	8 - 1976/206/ 1.33 H	R= 19.7 R_E	15 - 1976/206/ 11.92 H	R= 1.0 R_E
2 - 1976/209/ 23.33 H	R= 18.0 R_E	9 - 1976/206/ 3.33 H	R= 19.0 R_E	16 - 1976/206/ 11.58 H	R= 1.9 R_E
3 - 1976/205/ 5.33 H	R= 19.9 R_E	10 - 1976/206/ 8.42 H	R= 6.7 R_E	17 - 1976/206/ 11.67 H	R= 2.2 R_E
4 - 1976/205/ 13.33 H	R= 20.0 R_E	11 - 1976/206/ 10.33 H	R= 3.0 R_E	18 - 1976/206/ 11.75 H	R= 2.4 R_E
5 - 1976/205/ 18.83 H	R= 18.5 R_E	12 - 1976/206/ 10.83 H	R= 2.0 R_E	19 - 1976/206/ 12.10 H	R= 3.1 R_E
6 - 1976/205/ 21.83 H	R= 17.0 R_E	13 - 1976/206/ 11.08 H	R= 1.7 R_E	20 - 1976/206/ 13.75 H	R= 6.3 R_E
7 - 1976/205/ 23.67 H	R= 15.9 R_E	14 - 1976/206/ 11.33 H	R= 1.7 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/209/16.00H TO1976/206/17.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/206/ 17.00H	LAT= 56.4	11 - 1976/208/ 5.50H	LAT= 65.5		
2 - 1976/207/ 3.67H	LAT= 76.4	12 - 1976/208/ 8.67H	LAT= 56.5		
3 - 1976/207/ 9.17H	LAT= 80.9	13 - 1976/208/ 10.58H	LAT= 97.3		
4 - 1976/207/ 14.17H	LAT= 81.8	14 - 1976/208/ 12.00H	LAT= 35.0		
5 - 1976/207/ 16.17H	LAT= 81.2	15 - 1976/208/ 13.17H	LAT= 13.1		
6 - 1976/207/ 17.17H	LAT= 80.7	16 - 1976/208/ 14.17H	LAT= -51.8		
7 - 1976/207/ 18.17H	LAT= 80.0	17 - 1976/208/ 14.50H	LAT= -74.9		
8 - 1976/207/ 19.17H	LAT= 79.3	18 - 1976/208/ 14.88H	LAT= -28.7		
9 - 1976/207/ 20.67H	LAT= 78.0	19 - 1976/208/ 15.67H	LAT= 12.8		
10 - 1976/207/ 22.67H	LAT= 76.0	20 - 1976/208/ 17.75H	LAT= 43.5		

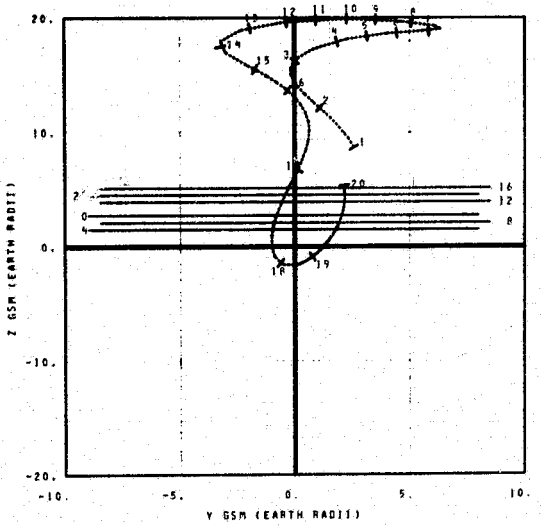
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/206/17.00H TO 1976/208/18.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/206/ 17.00H	R= 10.8RE	11 - 1976/207/ 17.17H	R= 19.9RE
2 - 1976/206/ 19.67H	R= 13.5RE	12 - 1976/207/ 18.17H	R= 19.7RE
3 - 1976/207/ 0.50H	R= 17.0RE	13 - 1976/207/ 19.67H	R= 19.3RE
4 - 1976/207/ 3.67H	R= 18.5RE	14 - 1976/207/ 23.17H	R= 18.0RE
5 - 1976/207/ 5.17H	R= 19.0RE	15 - 1976/208/ 2.67H	R= 16.1RE
6 - 1976/207/ 6.67H	R= 19.5RE	16 - 1976/208/ 5.00H	R= 14.4RE
7 - 1976/207/ 8.67H	R= 19.9RE	17 - 1976/208/ 10.58H	R= 8.3RE
8 - 1976/207/ 13.67H	R= 20.3RE	18 - 1976/208/ 14.25H	R= 1.8RE
9 - 1976/207/ 15.17H	R= 20.2RE	19 - 1976/208/ 15.10H	R= 2.6RE
10 - 1976/207/ 16.17H	R= 20.0RE	20 - 1976/208/ 18.00H	R= 8.0RE

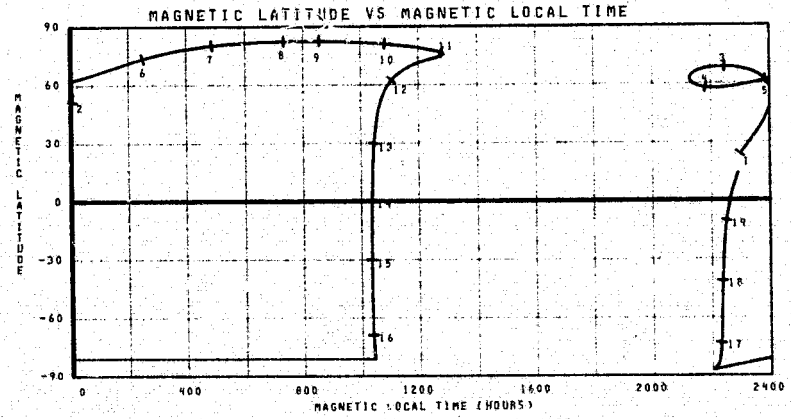
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/206/17.00H TO 1976/208/18.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

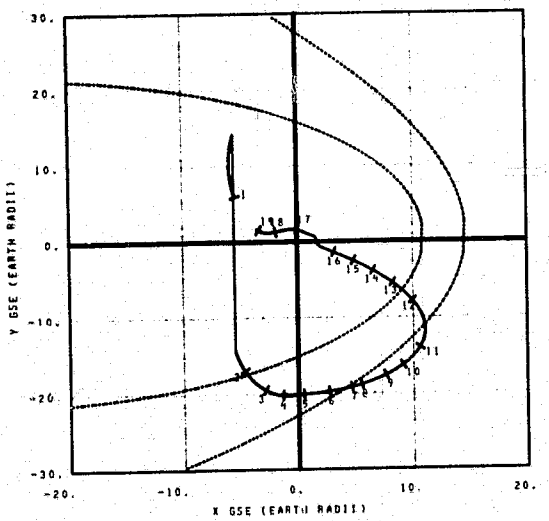
1 - 1976/206/ 17.00H	R= 10.8RE	8 - 1976/208/ 2.17H	R= 16.4RE	15 - 1976/208/ 14.25H	R= 1.8RE
2 - 1976/206/ 22.83H	R= 16.0RE	9 - 1976/208/ 2.83H	R= 16.0RE	16 - 1976/208/ 14.50H	R= 1.7RE
3 - 1976/207/ 4.67H	R= 18.9RE	10 - 1976/208/ 4.33H	R= 14.9RE	17 - 1976/208/ 14.78H	R= 2.0RE
4 - 1976/207/ 12.67H	R= 20.5RE	11 - 1976/208/ 7.50H	R= 12.1RE	18 - 1976/208/ 15.18H	R= 2.8RE
5 - 1976/207/ 17.67H	R= 19.8RE	12 - 1976/208/ 12.25H	R= 5.6RE	19 - 1976/208/ 16.10H	R= 5.7RE
6 - 1976/207/ 22.17H	R= 18.9RE	13 - 1976/208/ 13.58H	R= 3.0RE		
7 - 1976/208/ 0.67H	R= 17.3RE	14 - 1976/208/ 14.00H	R= 2.1RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/206/17.00H TO1976/208/18.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/208/ 18.00H	LAT= 45.9	11 - 1976/210/ 3.33H	LAT= 79.4		
2 - 1976/209/ 0.83H	LAT= 79.2	12 - 1976/210/ 10.17H	LAT= 62.0		
3 - 1976/209/ 10.83H	LAT= 80.0	13 - 1976/210/ 12.67H	LAT= 53.4		
4 - 1976/209/ 15.33H	LAT= 81.9	14 - 1976/210/ 14.33H	LAT= 43.6		
5 - 1976/209/ 19.33H	LAT= 81.2	15 - 1976/210/ 15.58H	LAT= 30.2		
6 - 1976/209/ 20.33H	LAT= 80.7	16 - 1976/210/ 16.58H	LAT= 6.4		
7 - 1976/209/ 21.33H	LAT= 80.1	17 - 1976/210/ 17.67H	LAT= -80.2		
8 - 1976/209/ 21.83H	LAT= 79.8	18 - 1976/210/ 18.17H	LAT= -22.5		
9 - 1976/209/ 23.33H	LAT= 78.6	19 - 1976/210/ 18.85H	LAT= 12.0		
10 - 1976/210/ 0.83H	LAT= 77.2				

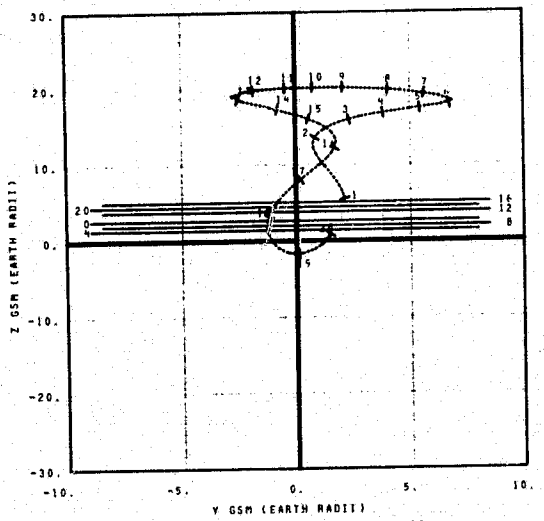
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/208/18.00H TO 1976/210/19.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/208/ 18.00H	R= 8.1RE	11 - 1976/209/ 18.83H	R= 20.1RE
2 - 1976/209/ 0.33H	R= 14.8RE	12 - 1976/209/ 20.33H	R= 19.9RE
3 - 1976/209/ 3.50H	R= 16.9RE	13 - 1976/210/ 0.33H	R= 18.8RE
4 - 1976/209/ 5.33H	R= 17.8RE	14 - 1976/210/ 3.33H	R= 17.5RE
5 - 1976/209/ 7.33H	R= 18.7RE	15 - 1976/210/ 5.33H	R= 16.9RE
6 - 1976/209/ 9.83H	R= 19.5RE	16 - 1976/210/ 9.67H	R= 13.1RE
7 - 1976/209/ 13.83H	R= 20.2RE	17 - 1976/210/ 13.00H	R= 9.4RE
8 - 1976/209/ 15.33H	R= 20.3RE	18 - 1976/210/ 15.50H	R= 5.9RE
9 - 1976/209/ 16.83H	R= 20.3RE	19 - 1976/210/ 17.75H	R= 1.7RE
10 - 1976/209/ 17.83H	R= 20.2RE	20 - 1976/210/ 18.98H	R= 4.1RE

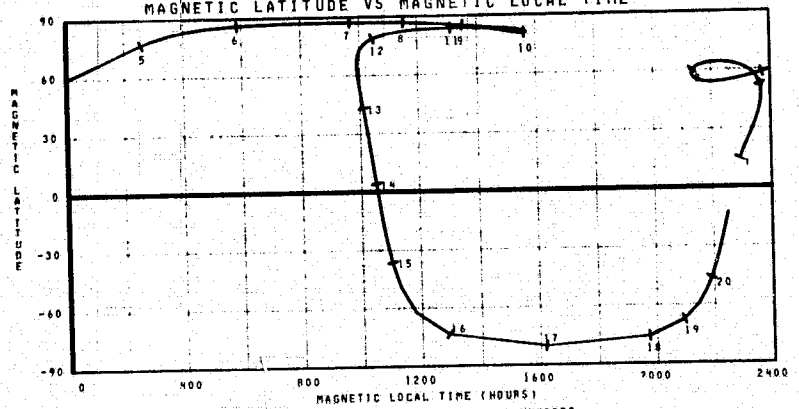
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/208/18.00H TO 1976/210/19.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

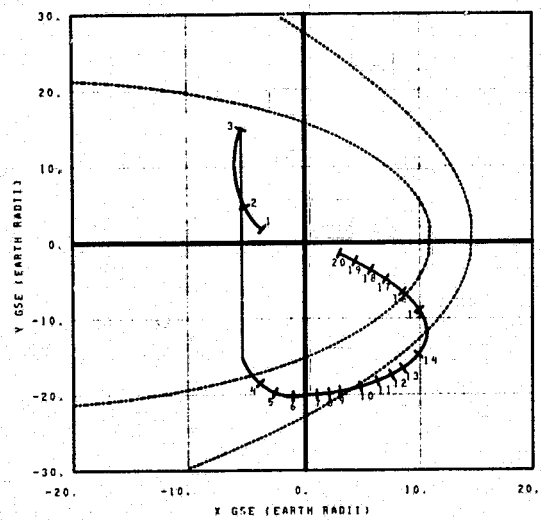
1 - 1976/208/ 18.00H	R= 8.1RE	8 - 1976/210/ 4.33H	R= 17.0RE	15 - 1976/210/ 17.50H	R= 1.7RE
2 - 1976/209/ 0.33H	R= 14.8RE	9 - 1976/210/ 5.33H	R= 16.4RE	16 - 1976/210/ 17.75H	R= 1.7RE
3 - 1976/209/ 3.33H	R= 16.8RE	10 - 1976/210/ 9.17H	R= 13.6RE	17 - 1976/210/ 17.83H	R= 1.8RE
4 - 1976/209/ 17.83H	R= 20.3RE	11 - 1976/210/ 12.83H	R= 9.6RE	18 - 1976/210/ 17.92H	R= 1.9RE
5 - 1976/209/ 23.83H	R= 19.0RE	12 - 1976/210/ 14.25H	R= 7.7RE	19 - 1976/210/ 18.08H	R= 2.0RE
6 - 1976/210/ 2.83H	R= 17.8RE	13 - 1976/210/ 16.50H	R= 3.6RE	20 - 1976/210/ 18.25H	R= 2.9RE
7 - 1976/210/ 3.83H	R= 17.3RE	14 - 1976/210/ 17.17H	R= 2.2RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/208 /18.00H TO1976/210 /19.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/210/ 19.00H	LAT= 14.3	11 - 1976/212/ 2.17H	LAT= 78.9
2 - 1976/210/ 20.50H	LAT= 40.3	12 - 1976/212/ 3.17H	LAT= 78.1
3 - 1976/211/ 5.17H	LAT= 70.0	13 - 1976/212/ 4.17H	LAT= 77.1
4 - 1976/211/ 11.17H	LAT= 77.6	14 - 1976/212/ 6.17H	LAT= 74.9
5 - 1976/211/ 15.17H	LAT= 80.6	15 - 1976/212/ 12.67H	LAT= 63.9
6 - 1976/211/ 19.67H	LAT= 81.9	16 - 1976/212/ 15.17H	LAT= 56.5
7 - 1976/211/ 23.17H	LAT= 81.0	17 - 1976/212/ 16.83H	LAT= 48.6
8 - 1976/211/ 23.67H	LAT= 80.7	18 - 1976/212/ 18.00H	LAT= 39.8
9 - 1976/212/ 0.17H	LAT= 80.4	19 - 1976/212/ 19.00H	LAT= 27.0
10 - 1976/212/ 1.17H	LAT= 79.7	20 - 1976/212/ 19.83H	LAT= 5.2

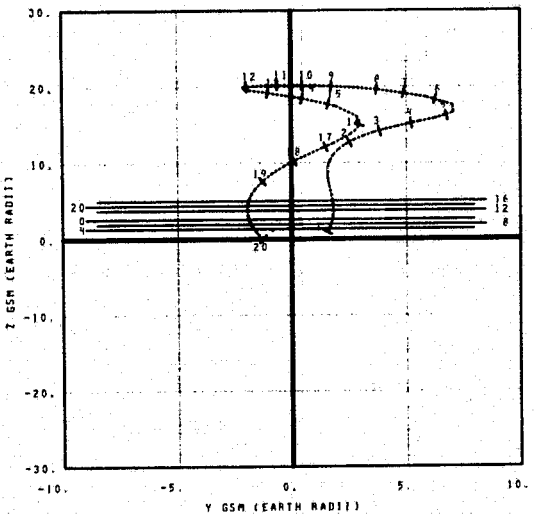
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/210/19.00H TO 1976/212/20.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/210/ 19.00H	R= 4.1RE	11 - 1976/211/ 19.67H	R= 20.3RE
2 - 1976/211/ 2.83H	R= 14.2RE	12 - 1976/211/ 21.67H	R= 20.2RE
3 - 1976/211/ 4.83H	R= 15.7RE	13 - 1976/212/ 2.17H	R= 19.3RE
4 - 1976/211/ 6.67H	R= 16.9RE	14 - 1976/212/ 4.17H	R= 18.6RE
5 - 1976/211/ 9.17H	R= 18.1RE	15 - 1976/212/ 5.67H	R= 18.0RE
6 - 1976/211/ 13.67H	R= 19.4RE	16 - 1976/212/ 9.67H	R= 15.7RE
7 - 1976/211/ 15.17H	R= 19.9RE	17 - 1976/212/ 13.00H	R= 13.0RE
8 - 1976/211/ 16.17H	R= 20.1RE	18 - 1976/212/ 14.67H	R= 11.3RE
9 - 1976/211/ 17.67H	R= 20.2RE	19 - 1976/212/ 16.50H	R= 9.0RE
10 - 1976/211/ 18.67H	R= 20.3RE	20 - 1976/212/ 20.00H	R= 3.0RE

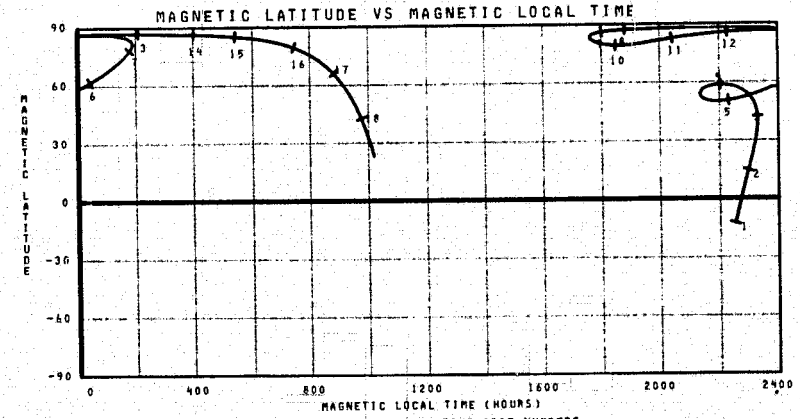
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/210/19.00H TO 1976/212/20.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

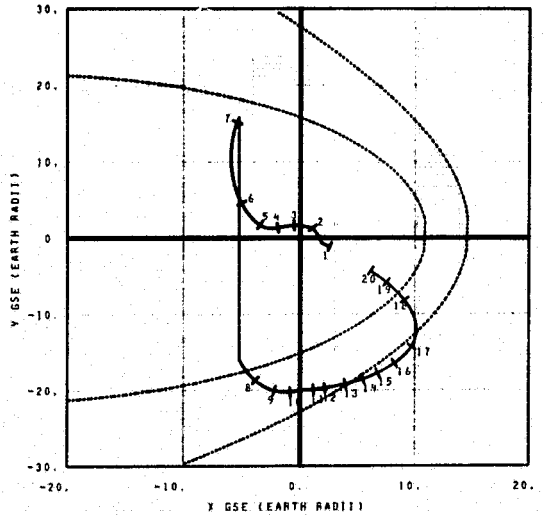
1 - 1976/210/ 19.00H	R= 4.1RE	8 - 1976/212/ 4.67H	R= 18.9RE	15 - 1976/212/ 15.83H	R= 9.9RE
2 - 1976/210/ 20.50H	R= 6.9RE	9 - 1976/212/ 5.17H	R= 19.2RE	16 - 1976/212/ 16.83H	R= 8.6RE
3 - 1976/210/ 23.83H	R= 11.3RE	10 - 1976/212/ 9.83H	R= 19.6RE	17 - 1976/212/ 18.25H	R= 6.4RE
4 - 1976/211/ 5.17H	R= 19.9RE	11 - 1976/212/ 13.17H	R= 12.0RE	18 - 1976/212/ 19.50H	R= 4.0RE
5 - 1976/211/ 14.67H	R= 19.8RE	12 - 1976/212/ 14.33H	R= 11.7RE		
6 - 1976/211/ 20.17H	R= 20.3RE	13 - 1976/212/ 15.17H	R= 10.7RE		
7 - 1976/212/ 0.67H	R= 19.7RE	14 - 1976/212/ 15.50H	R= 10.3RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/210 /19.00H TO1976/212 /20.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/212/ 20.00H	LAT= -6.7	11 - 1976/214/ 2.83H	LAT= 80.7
2 - 1976/212/ 20.83H	LAT= -81.7	12 - 1976/214/ 3.33H	LAT= 80.4
3 - 1976/212/ 21.00H	LAT= -64.7	13 - 1976/214/ 4.33H	LAT= 79.8
4 - 1976/212/ 21.40H	LAT= -20.8	14 - 1976/214/ 5.33H	LAT= 79.0
5 - 1976/212/ 22.10H	LAT= 13.1	15 - 1976/214/ 6.33H	LAT= 78.1
6 - 1976/212/ 23.67H	LAT= 39.1	16 - 1976/214/ 7.83H	LAT= 76.7
7 - 1976/213/ 0.67H	LAT= 70.5	17 - 1976/214/ 10.33H	LAT= 73.7
8 - 1976/213/ 14.83H	LAT= 77.9	18 - 1976/214/ 17.00H	LAT= 61.0
9 - 1976/213/ 19.83H	LAT= 81.3	19 - 1976/214/ 19.33H	LAT= 52.5
10 - 1976/213/ 23.83H	LAT= 81.8	20 - 1976/214/ 20.75H	LAT= 43.9

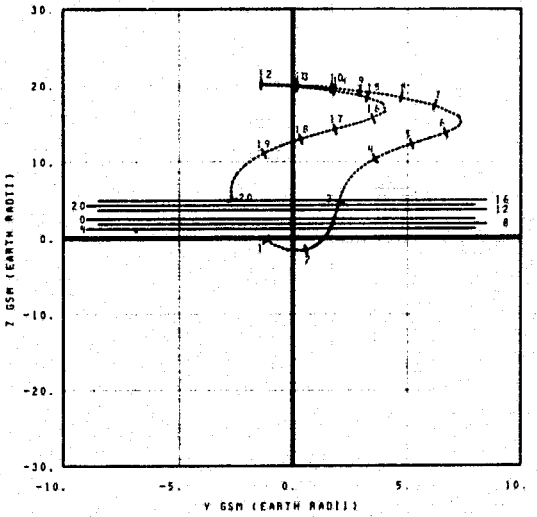
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/212/20.00H TO 1976/214/21.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/212/ 20.00H	R= 2.8RE	11 - 1976/213/ 19.83H	R= 20.1RE
2 - 1976/212/ 21.00H	R= 1.6RE	12 - 1976/213/ 22.33H	R= 20.3RE
3 - 1976/212/ 24.00H	R= 7.3RE	13 - 1976/214/ 2.83H	R= 19.9RE
4 - 1976/213/ 4.17H	R= 12.5RE	14 - 1976/214/ 4.83H	R= 19.9RE
5 - 1976/213/ 6.50H	R= 14.6RE	15 - 1976/214/ 6.83H	R= 18.8RE
6 - 1976/213/ 8.83H	R= 16.2RE	16 - 1976/214/ 11.83H	R= 16.9RE
7 - 1976/213/ 14.33H	R= 18.9RE	17 - 1976/214/ 14.00H	R= 14.9RE
8 - 1976/213/ 15.83H	R= 19.9RE	18 - 1976/214/ 15.50H	R= 13.6RE
9 - 1976/213/ 17.33H	R= 19.7RE	19 - 1976/214/ 17.17H	R= 12.1RE
10 - 1976/213/ 18.33H	R= 19.9RE	20 - 1976/214/ 21.00H	R= 7.2RE

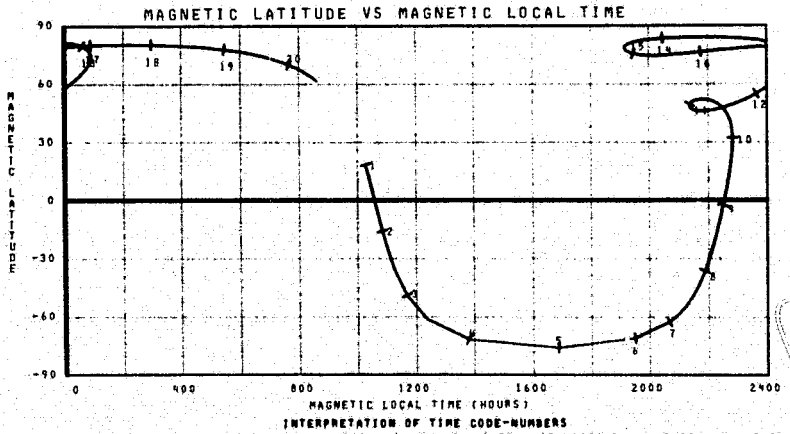
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/212/20.00H TO 1976/214/21.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

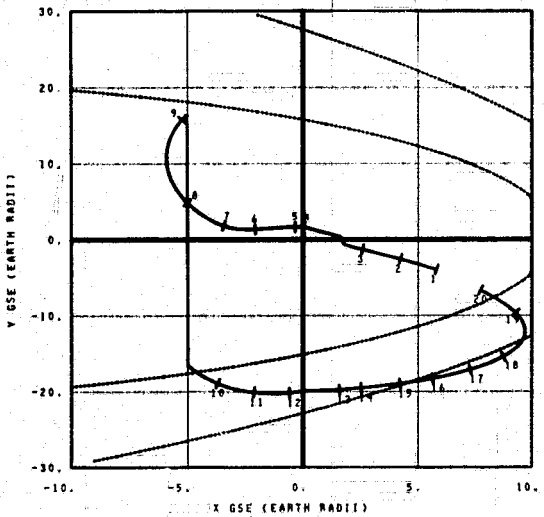
1 - 1976/212/ 20.00H	R= 2.8RE	8 - 1976/212/ 21.47H	R= 2.5RE	15 - 1976/214/ 9.33H	R= 17.8RE
2 - 1976/212/ 20.50H	R= 2.0RE	9 - 1976/212/ 22.25H	R= 4.1RE	16 - 1976/214/ 13.83H	R= 15.6RE
3 - 1976/212/ 20.75H	R= 1.7RE	10 - 1976/213/ 0.50H	R= 8.1RE	17 - 1976/214/ 16.33H	R= 12.9RE
4 - 1976/212/ 20.92H	R= 1.7RE	11 - 1976/213/ 8.83H	R= 16.2RE	18 - 1976/214/ 17.33H	R= 11.9RE
5 - 1976/212/ 21.00H	R= 1.7RE	12 - 1976/213/ 18.83H	R= 20.0RE	19 - 1976/214/ 18.50H	R= 10.6RE
6 - 1976/212/ 21.08H	R= 1.8RE	13 - 1976/214/ 1.83H	R= 20.0RE	20 - 1976/214/ 20.00H	R= 8.1RE
7 - 1976/212/ 21.17H	R= 2.0RE	14 - 1976/214/ 4.83H	R= 19.9RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/212 /20.00H TO1976/214 /21.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/214/ 21.00H	LAT= 41.1	11 - 1976/215/ 23.67H	LAT= 81.5		
2 - 1976/214/ 22.25H	LAT= 26.4	12 - 1976/216/ 9.17H	LAT= 81.6		
3 - 1976/214/ 23.25H	LAT= -9.1	13 - 1976/216/ 6.67H	LAT= 80.4		
4 - 1976/215/ 0.00H	LAT= -61.0	14 - 1976/216/ 7.17H	LAT= 80.1		
5 - 1976/215/ 0.17H	LAT= -71.2	15 - 1976/216/ 8.17H	LAT= 79.3		
6 - 1976/215/ 0.67H	LAT= -16.8	16 - 1976/216/ 9.17H	LAT= 78.5		
7 - 1976/215/ 1.33H	LAT= 13.7	17 - 1976/216/ 10.67H	LAT= 77.1		
8 - 1976/215/ 3.00H	LAT= 90.2	18 - 1976/216/ 12.67H	LAT= 74.9		
9 - 1976/215/ 12.67H	LAT= 71.6	19 - 1976/216/ 15.00H	LAT= 69.2		
10 - 1976/215/ 18.67H	LAT= 78.5	20 - 1976/216/ 22.00H	LAT= 59.9		

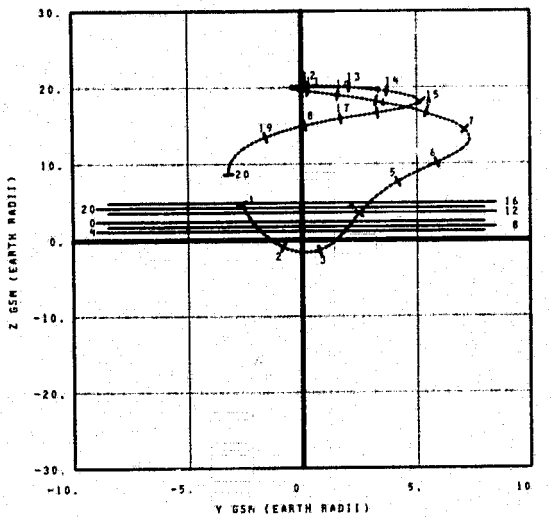
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/214/21.00H TO 1976/216/22.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/214/ 21.00H	R= 7.0R_E	11 - 1976/215/ 20.67H	R= 19.6R_E
2 - 1976/214/ 23.50H	R= 2.2R_E	12 - 1976/216/ 1.67H	R= 20.3R_E
3 - 1976/215/ 0.42H	R= 2.0R_E	13 - 1976/216/ 4.17H	R= 20.2R_E
4 - 1976/215/ 2.67H	R= 6.4R_E	14 - 1976/216/ 6.17H	R= 19.9R_E
5 - 1976/215/ 5.50H	R= 10.4R_E	15 - 1976/216/ 9.67H	R= 18.9R_E
6 - 1976/215/ 8.00H	R= 13.1R_E	16 - 1976/216/ 13.67H	R= 17.2R_E
7 - 1976/215/ 13.17H	R= 16.9R_E	17 - 1976/216/ 15.17H	R= 16.3R_E
8 - 1976/215/ 15.67H	R= 18.2R_E	18 - 1976/216/ 16.50H	R= 15.4R_E
9 - 1976/215/ 17.67H	R= 18.9R_E	19 - 1976/216/ 18.17H	R= 14.1R_E
10 - 1976/215/ 19.17H	R= 19.4R_E	20 - 1976/216/ 22.00H	R= 10.2R_E

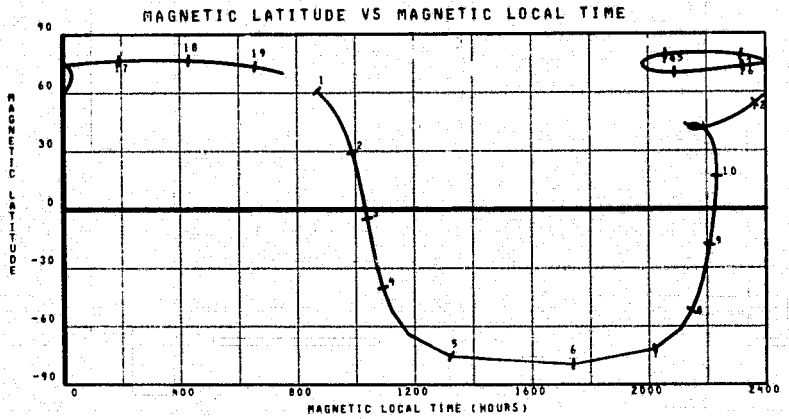
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/214/21.00H TO 1976/216/22.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

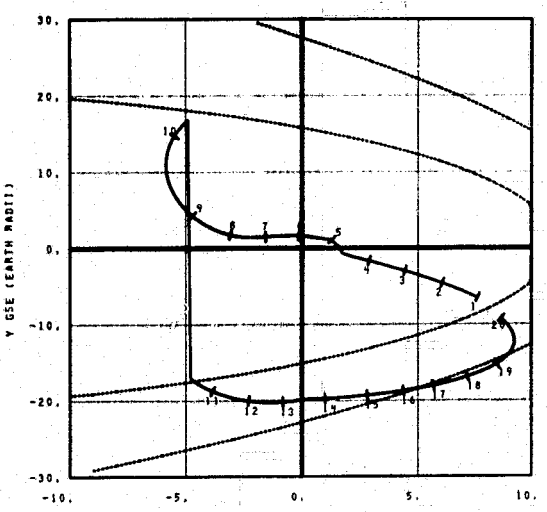
1 - 1976/214/ 21.00H	R= 7.0R_E	8 - 1976/215/ 0.42H	R= 2.0R_E	15 - 1976/216/ 12.17H	R= 17.9R_E
2 - 1976/214/ 22.83H	R= 3.8R_E	9 - 1976/215/ 0.83H	R= 2.1R_E	16 - 1976/216/ 13.83H	R= 18.9R_E
3 - 1976/214/ 23.50H	R= 2.4R_E	10 - 1976/215/ 2.00H	R= 5.2R_E	17 - 1976/216/ 16.17H	R= 19.1R_E
4 - 1976/214/ 23.83H	R= 1.8R_E	11 - 1976/215/ 9.17H	R= 19.1R_E	18 - 1976/216/ 19.67H	R= 12.8R_E
5 - 1976/215/ 0.08H	R= 1.7R_E	12 - 1976/215/ 19.67H	R= 19.5R_E	19 - 1976/216/ 21.17H	R= 11.2R_E
6 - 1976/215/ 0.17H	R= 1.7R_E	13 - 1976/216/ 2.67H	R= 20.2R_E		
7 - 1976/215/ 0.25H	R= 1.8R_E	14 - 1976/216/ 9.17H	R= 20.0R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/214/21.00H TO1976/216 /22.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/216/ 22.17H	LAT= 54.2	11 - 1976/217/ 21.50H	LAT= 78.1
2 - 1976/216/ 23.92H	LAT= 44.2	12 - 1976/218/ 2.50H	LAT= 81.4
3 - 1976/217/ 1.25H	LAT= 29.9	13 - 1976/218/ 7.00H	LAT= 81.7
4 - 1976/217/ 2.25H	LAT= 5.5	14 - 1976/218/ 10.00H	LAT= 80.9
5 - 1976/217/ 3.25H	LAT= -81.9	15 - 1976/218/ 11.00H	LAT= 79.7
6 - 1976/217/ 3.33H	LAT= -77.0	16 - 1976/218/ 12.00H	LAT= 78.9
7 - 1976/217/ 3.73H	LAT= -28.6	17 - 1976/218/ 13.00H	LAT= 78.0
8 - 1976/217/ 4.38H	LAT= 8.5	18 - 1976/218/ 14.50H	LAT= 76.5
9 - 1976/217/ 5.83H	LAT= 36.3	19 - 1976/218/ 16.50H	LAT= 74.2
10 - 1976/217/ 14.50H	LAT= 69.4	20 - 1976/218/ 23.00H	LAT= 62.3

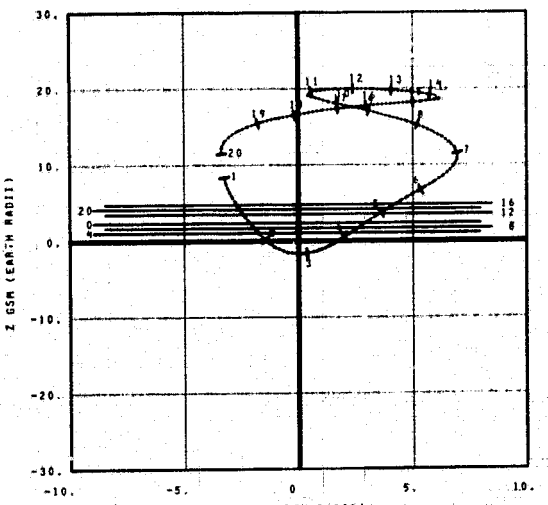
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/216/22.00H TO 1976/218/23.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/216/ 22.17H	R= 10.0R_E	11 - 1976/218/ 8.50H	R= 19.9R_E
2 - 1976/217/ 2.92H	R= 3.0R_E	12 - 1976/218/ 9.50H	R= 20.2R_E
3 - 1976/217/ 3.50H	R= 1.0R_E	13 - 1976/218/ 9.50H	R= 21.1R_E
4 - 1976/217/ 4.50H	R= 4.0R_E	14 - 1976/218/ 8.00H	R= 20.1R_E
5 - 1976/217/ 6.33H	R= 7.2R_E	15 - 1976/218/ 13.00H	R= 18.4R_E
6 - 1976/217/ 8.50H	R= 10.3R_E	16 - 1976/218/ 15.00H	R= 18.1R_E
7 - 1976/217/ 13.00H	R= 10.4R_E	17 - 1976/218/ 16.00H	R= 17.6R_E
8 - 1976/217/ 16.33H	R= 14.9R_E	18 - 1976/218/ 17.50H	R= 16.0R_E
9 - 1976/217/ 18.50H	R= 18.0R_E	19 - 1976/218/ 19.00H	R= 15.9R_E
10 - 1976/217/ 20.00H	R= 18.6R_E	20 - 1976/218/ 23.00H	R= 12.6R_E

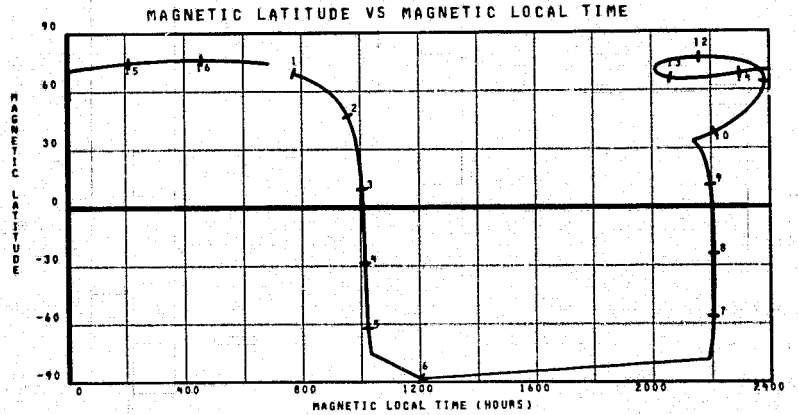
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/216/22.00H TO 1976/218/23.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

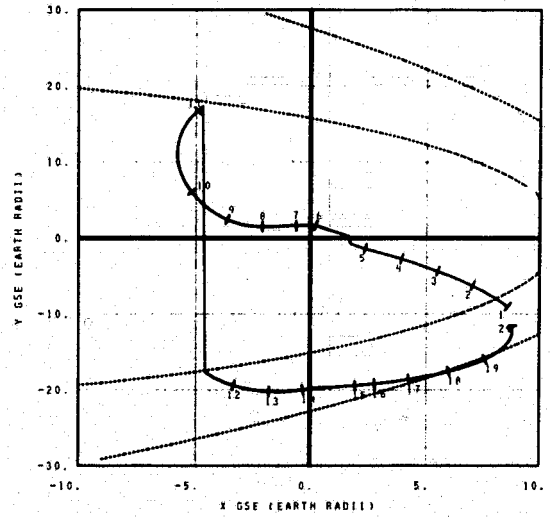
1 - 1976/216/ 22.17H	R= 10.0R_E	8 - 1976/217/ 3.95H	R= 2.6R_E
2 - 1976/217/ 0.92H	R= 4.0R_E	9 - 1976/217/ 5.00H	R= 4.8R_E
3 - 1976/217/ 2.42H	R= 3.0R_E	10 - 1976/217/ 15.33H	R= 14.3R_E
4 - 1976/217/ 2.92H	R= 2.0R_E	11 - 1976/217/ 23.00H	R= 19.4R_E
5 - 1976/217/ 3.17H	R= 1.7R_E	12 - 1976/218/ 9.00H	R= 20.3R_E
6 - 1976/217/ 3.33H	R= 1.7R_E	13 - 1976/218/ 11.00H	R= 19.5R_E
7 - 1976/217/ 3.58H	R= 1.9R_E	14 - 1976/218/ 16.00H	R= 17.6R_E
		15 - 1976/218/ 19.50H	R= 15.8R_E
		16 - 1976/218/ 21.33H	R= 14.1R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/216 /22.00H TO19T6/218 /23.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/218/	23.17H	LAT=	41.8	11 - 1976/219/	20.67H	LAT=	73.6
2 - 1976/219/	1.83H	LAT=	52.1	12 - 1976/220/	2.67H	LAT=	70.6
3 - 1976/219/	3.50H	LAT=	61.2	13 - 1976/220/	7.67H	LAT=	81.9
4 - 1976/219/	4.75H	LAT=	24.9	14 - 1976/220/	12.17H	LAT=	81.8
5 - 1976/219/	5.75H	LAT=	-8.7	15 - 1976/220/	14.17H	LAT=	79.8
6 - 1976/219/	6.50H	LAT=	-81.2	16 - 1976/220/	14.67H	LAT=	79.9
7 - 1976/219/	6.67H	LAT=	-60.1	17 - 1976/220/	15.67H	LAT=	78.6
8 - 1976/219/	7.13H	LAT=	-13.8	18 - 1976/220/	17.17H	LAT=	77.1
9 - 1976/219/	7.98H	LAT=	19.5	19 - 1976/220/	19.17H	LAT=	74.9
10 - 1976/219/	10.00H	LAT=	45.2	20 - 1976/220/	24.00H	LAT=	67.9

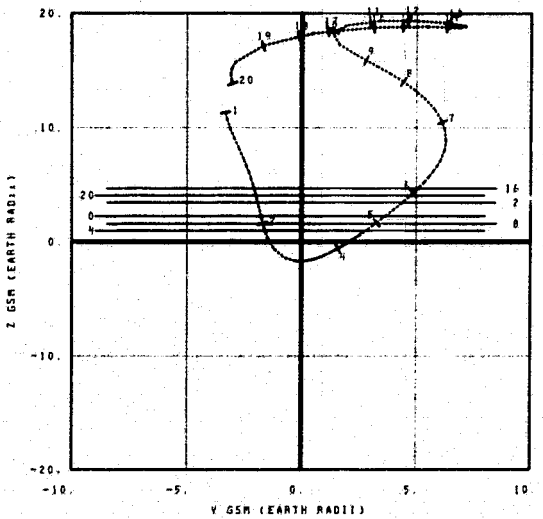
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/218/23.00H TO 1976/220/24.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/218/	23.17H	R= 12.5R_E	11 - 1976/220/	3.17H	R= 19.6R_E
2 - 1976/219/	5.17H	R= 4.0R_E	12 - 1976/220/	5.17H	R= 20.1R_E
3 - 1976/219/	6.65H	R= 1.0R_E	13 - 1976/220/	7.67H	R= 22.3R_E
4 - 1976/219/	7.43H	R= 3.2R_E	14 - 1976/220/	12.67H	R= 19.8R_E
5 - 1976/219/	8.67H	R= 5.7R_E	15 - 1976/220/	14.67H	R= 19.9R_E
6 - 1976/219/	10.33H	R= 8.9R_E	16 - 1976/220/	15.67H	R= 19.1R_E
7 - 1976/219/	14.83H	R= 13.5R_E	17 - 1976/220/	17.17H	R= 18.5R_E
8 - 1976/219/	17.67H	R= 15.7R_E	18 - 1976/220/	18.17H	R= 18.1R_E
9 - 1976/219/	19.67H	R= 16.9R_E	19 - 1976/220/	19.67H	R= 17.9R_E
10 - 1976/220/	0.17H	R= 19.0R_E	20 - 1976/220/	24.00H	R= 19.6R_E

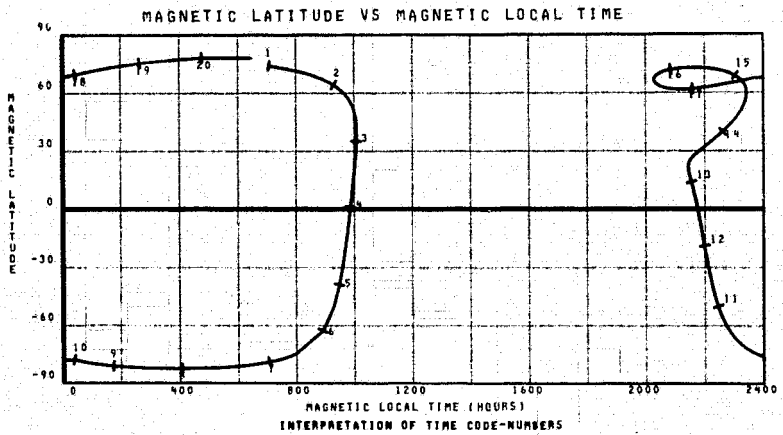
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/218/23.00H TO 1976/220/24.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

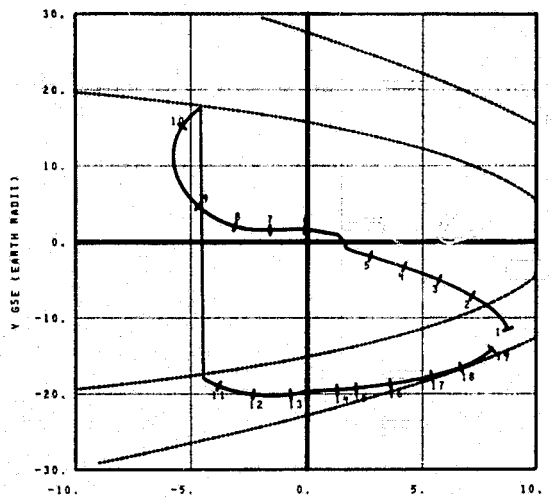
1 - 1976/218/	23.17H	R= 12.5R_E	8 - 1976/219/	6.58H	R= 1.7R_E	15 - 1976/220/	1.17H	R= 19.3R_E
2 - 1976/219/	1.03H	R= 9.4R_E	9 - 1976/219/	6.62H	R= 1.7R_E	16 - 1976/220/	5.17H	R= 20.1R_E
3 - 1976/219/	4.92H	R= 4.5R_E	10 - 1976/219/	6.65H	R= 1.8R_E	17 - 1976/220/	13.67H	R= 19.6R_E
4 - 1976/219/	5.83H	R= 2.4R_E	11 - 1976/219/	6.90H	R= 2.1R_E	18 - 1976/220/	18.67H	R= 17.9R_E
5 - 1976/219/	6.25H	R= 1.8R_E	12 - 1976/219/	7.38H	R= 3.1R_E	19 - 1976/220/	21.17H	R= 16.4R_E
6 - 1976/219/	6.42H	R= 1.7R_E	13 - 1976/219/	9.25H	R= 6.7R_E	20 - 1976/220/	22.83H	R= 15.5R_E
7 - 1976/219/	6.53H	R= 1.7R_E	14 - 1976/219/	17.83H	R= 15.8R_E			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/218/23.00H TO1976/220/24.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/221/	0.17H	LAT=	67.1	11 -	1976/222/	9.50H	LAT= 78.5
2 -	1976/221/	4.50H	LAT=	84.7	12 -	1976/222/	9.50H	LAT= 81.9
3 -	1976/221/	6.33H	LAT=	88.3	13 -	1976/222/	14.50H	LAT= 81.4
4 -	1976/221/	7.67H	LAT=	30.0	14 -	1976/222/	17.50H	LAT= 79.7
5 -	1976/221/	8.67H	LAT=	5.5	15 -	1976/222/	18.00H	LAT= 79.3
6 -	1976/221/	9.75H	LAT=	-77.0	16 -	1976/222/	19.00H	LAT= 78.5
7 -	1976/221/	10.10H	LAT=	-25.0	17 -	1976/222/	20.50H	LAT= 77.1
8 -	1976/221/	10.00H	LAT=	11.0	18 -	1976/222/	22.00H	LAT= 75.4
9 -	1976/221/	12.92H	LAT=	37.9	19 -	1976/223/	0.03H	LAT= 71.6
10 -	1976/221/	21.50H	LAT=	70.2				

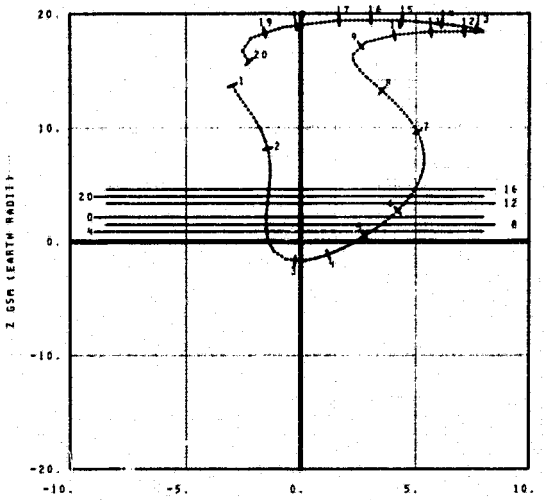
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/220/24.00H TO 1976/223/ 1.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/221/	0.17H	R=	14.9R_E	11 -	1976/222/	9.50H	R= 19.6R_E
2 -	1976/221/	4.50H	R=	9.3R_E	12 -	1976/222/	7.50H	R= 20.0R_E
3 -	1976/221/	6.33H	R=	1.7R_E	13 -	1976/222/	12.00H	R= 20.3R_E
4 -	1976/221/	7.67H	R=	2.8R_E	14 -	1976/222/	14.00H	R= 20.1R_E
5 -	1976/221/	8.67H	R=	4.7R_E	15 -	1976/222/	15.50H	R= 19.9R_E
6 -	1976/221/	9.75H	R=	6.9R_E	16 -	1976/222/	16.50H	R= 19.7R_E
7 -	1976/221/	10.03H	R=	12.3R_E	17 -	1976/222/	17.50H	R= 19.5R_E
8 -	1976/221/	10.47H	R=	14.0R_E	18 -	1976/222/	19.00H	R= 19.0R_E
9 -	1976/222/	1.00H	R=	18.0R_E	19 -	1976/222/	20.50H	R= 18.5R_E
10 -	1976/222/	3.50H	R=	19.0R_E	20 -	1976/223/	1.00H	R= 14.2R_E

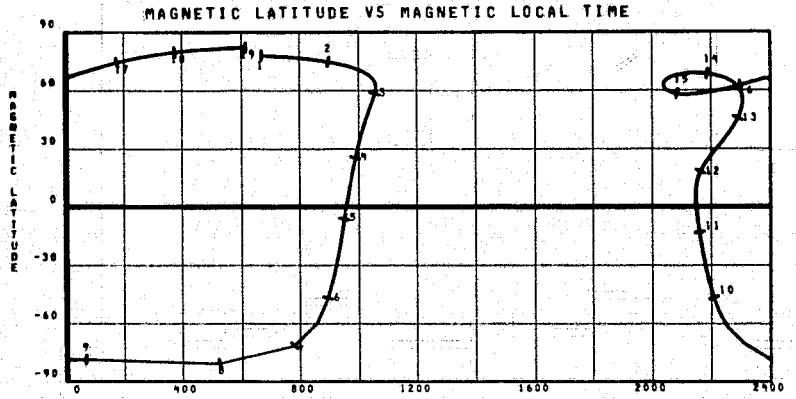
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/220/24.00H TO 1976/223/ 1.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

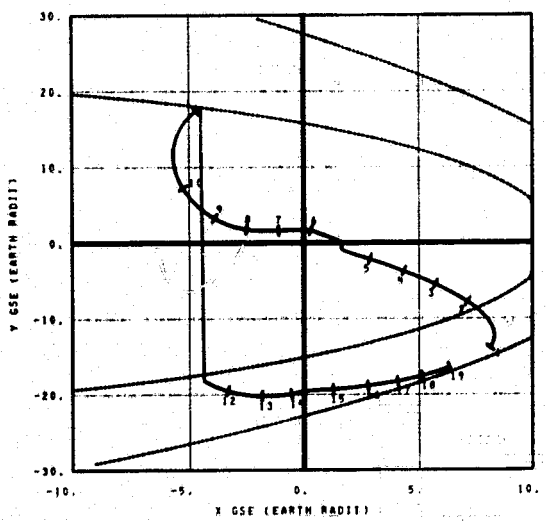
1 -	1976/221/	0.17H	R=	14.9R_E	8 -	1976/221/	9.83H	R= 1.7R_E
2 -	1976/221/	2.17H	R=	12.7R_E	9 -	1976/221/	9.92H	R= 1.0R_E
3 -	1976/221/	6.75H	R=	7.0R_E	10 -	1976/221/	10.27H	R= 2.9R_E
4 -	1976/221/	8.75H	R=	3.2R_E	11 -	1976/221/	11.08H	R= 4.2R_E
5 -	1976/221/	9.25H	R=	2.1R_E	12 -	1976/221/	14.92H	R= 9.6R_E
6 -	1976/221/	9.58H	R=	1.7R_E	13 -	1976/221/	20.50H	R= 15.4R_E
7 -	1976/221/	9.75H	R=	1.7R_E	14 -	1976/222/	3.00H	R= 18.8R_E
					15 -	1976/222/	11.50H	R= 20.3R_E
					16 -	1976/222/	17.00H	R= 19.4R_E
					17 -	1976/222/	21.50H	R= 18.1R_E
					18 -	1976/222/	22.50H	R= 17.1R_E
					19 -	1976/223/	1.00H	R= 14.2R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/220/24.00H TO1976/223 / 1.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/223/	1.17H	LAT=	71.1	11 - 1976/224/	9.17H	LAT=	79.8
2 - 1976/223/	7.33H	LAT=	56.3	12 - 1976/224/	9.67H	LAT=	79.9
3 - 1976/223/	9.33H	LAT=	46.0	13 - 1976/224/	10.67H	LAT=	81.9
4 - 1976/223/	10.67H	LAT=	33.1	14 - 1976/224/	10.67H	LAT=	81.8
5 - 1976/223/	11.75H	LAT=	10.2	15 - 1976/224/	21.17H	LAT=	79.4
6 - 1976/223/	12.92H	LAT=	-01.1	16 - 1976/224/	22.17H	LAT=	78.6
7 - 1976/223/	13.25H	LAT=	-41.3	17 - 1976/224/	23.17H	LAT=	77.7
8 - 1976/223/	13.77H	LAT=	-1.6	18 - 1976/225/	0.17H	LAT=	76.6
9 - 1976/223/	14.75H	LAT=	26.9	19 - 1976/225/	1.67H	LAT=	74.9
10 - 1976/223/	17.17H	LAT=	59.2				

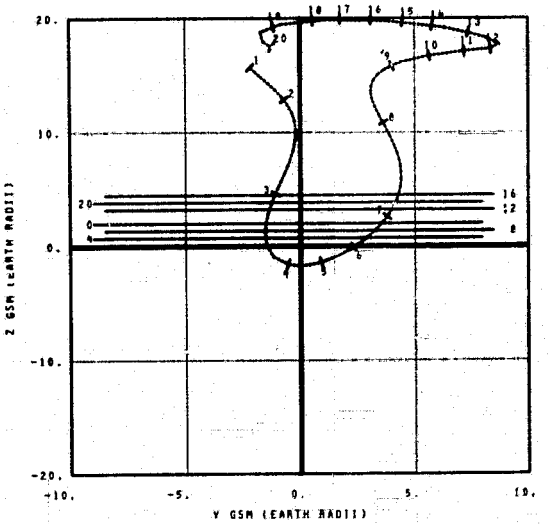
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/223/ 1.00H TO 1976/225/ 2.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/223/	1.17H	R=	16.1RE	11 - 1976/224/	9.67H	R=	19.6RE
2 - 1976/223/	7.33H	R=	13.3RE	12 - 1976/224/	9.67H	R=	19.6RE
3 - 1976/223/	10.50H	R=	6.0RE	13 - 1976/224/	11.67H	R=	20.3RE
4 - 1976/223/	10.92H	R=	1.7RE	14 - 1976/224/	19.17H	R=	20.3RE
5 - 1976/223/	13.67H	R=	2.4RE	15 - 1976/224/	16.17H	R=	20.2RE
6 - 1976/223/	14.18H	R=	3.9RE	16 - 1976/224/	17.17H	R=	20.1RE
7 - 1976/223/	15.50H	R=	6.4RE	17 - 1976/224/	18.17H	R=	20.0RE
8 - 1976/223/	20.50H	R=	12.8RE	18 - 1976/224/	19.17H	R=	19.8RE
9 - 1976/224/	2.33H	R=	17.1RE	19 - 1976/224/	21.17H	R=	19.4RE
10 - 1976/224/	9.67H	R=	18.2RE	20 - 1976/225/	1.67H	R=	17.6RE

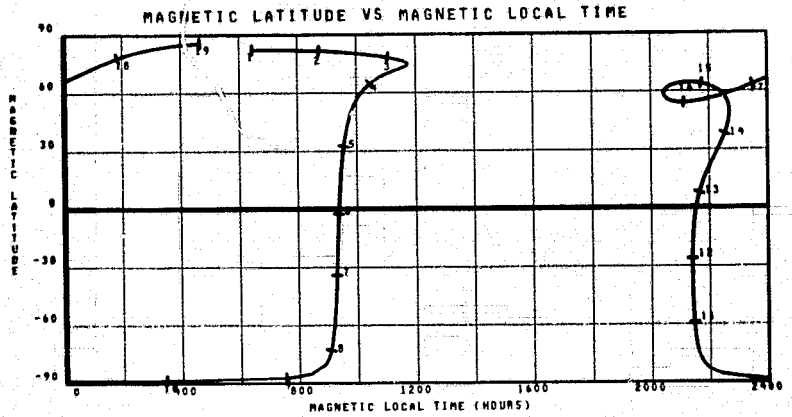
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/223/ 1.00H TO 1975/225/ 2.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

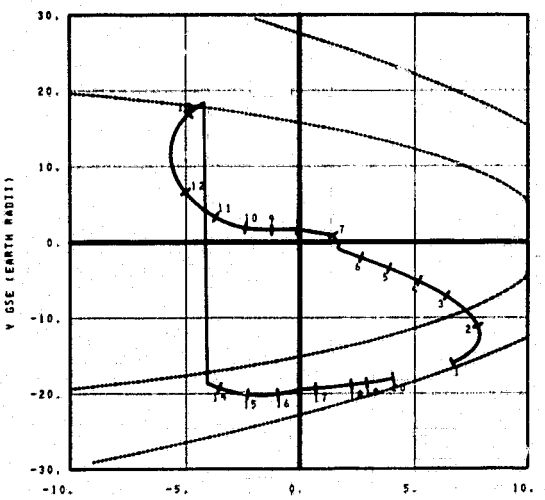
1 - 1976/223/	1.17H	R=	16.1RE	8 - 1976/223/	13.00H	R=	1.7RE	15 - 1976/224/	2.00H	R=	17.9RE
2 - 1976/223/	2.50H	R=	15.1RE	9 - 1976/223/	13.10H	R=	1.0RE	16 - 1976/224/	10.67H	R=	20.0RE
3 - 1976/223/	4.83H	R=	13.2RE	10 - 1976/223/	13.12H	R=	1.0RE	17 - 1976/224/	10.67H	R=	19.9RE
4 - 1976/223/	10.92H	R=	6.2RE	11 - 1976/223/	13.30H	R=	2.3RE	18 - 1976/224/	23.17H	R=	18.7RE
5 - 1976/223/	12.00H	R=	3.1RE	12 - 1976/223/	14.00H	R=	3.6RE	19 - 1976/225/	1.67H	R=	17.6RE
6 - 1976/223/	12.90H	R=	2.1RE	13 - 1976/223/	15.98H	R=	7.1RE				
7 - 1976/223/	12.75H	R=	1.7RE	14 - 1976/223/	20.33H	R=	12.6RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/223 / 1.00H TO1976/225 / 2.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/225/	2.17H	LAT=	74.3	11 - 1976/225/	17.92H	LAT=	25.6
2 - 1976/225/	7.67H	LAT=	64.9	12 - 1976/225/	19.92H	LAT=	46.9
3 - 1976/225/	11.33H	LAT=	53.0	13 - 1976/226/	6.50H	LAT=	73.7
4 - 1976/225/	12.92H	LAT=	43.2	14 - 1976/226/	12.00H	LAT=	79.2
5 - 1976/225/	14.17H	LAT=	28.9	15 - 1976/226/	16.50H	LAT=	81.6
6 - 1976/225/	15.08H	LAT=	9.7	16 - 1976/226/	21.00H	LAT=	81.9
7 - 1976/225/	16.00H	LAT=	-81.4	17 - 1976/227/	0.50H	LAT=	79.3
8 - 1976/225/	16.17H	LAT=	-76.9	18 - 1976/227/	1.50H	LAT=	78.5
9 - 1976/225/	16.50H	LAT=	-55.0	19 - 1976/227/	2.00H	LAT=	78.1
10 - 1976/225/	16.98H	LAT=	-1.2	20 - 1976/227/	3.00H	LAT=	77.1

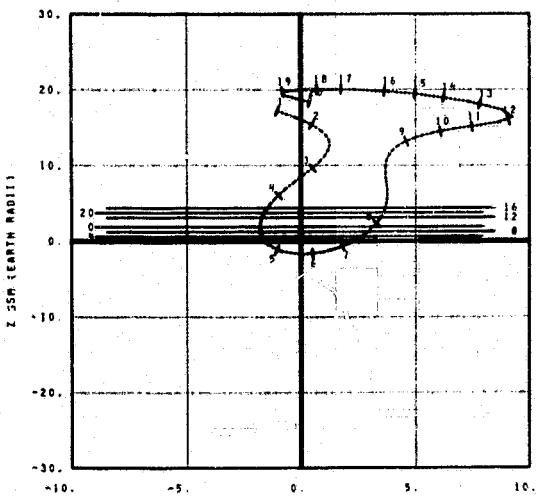
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/225/ 2.00H TO 1976/227/ 3.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/225/	2.17H	R=	17.9R_E	11 - 1976/226/	6.50H	R=	17.6R_E
2 - 1976/225/	5.00H	R=	15.6R_E	12 - 1976/226/	9.50H	R=	10.9R_E
3 - 1976/225/	10.67H	R=	10.9R_E	13 - 1976/226/	14.00H	R=	20.0R_E
4 - 1976/225/	13.00H	R=	7.2R_E	14 - 1976/226/	19.50H	R=	20.2R_E
5 - 1976/225/	15.83H	R=	1.9R_E	15 - 1976/226/	16.50H	R=	20.3R_E
6 - 1976/225/	16.42H	R=	[illegible]	16 - 1976/226/	17.50H	R=	20.3R_E
7 - 1976/225/	16.98H	R=	3.1R_E	17 - 1976/226/	19.00H	R=	20.2R_E
8 - 1976/225/	16.33H	R=	9.6R_E	18 - 1976/226/	20.00H	R=	20.2R_E
9 - 1976/226/	2.33H	R=	15.8R_E	19 - 1976/226/	22.50H	R=	19.8R_E
10 - 1976/226/	4.67H	R=	16.6R_E	20 - 1976/227/	3.00H	R=	18.5R_E

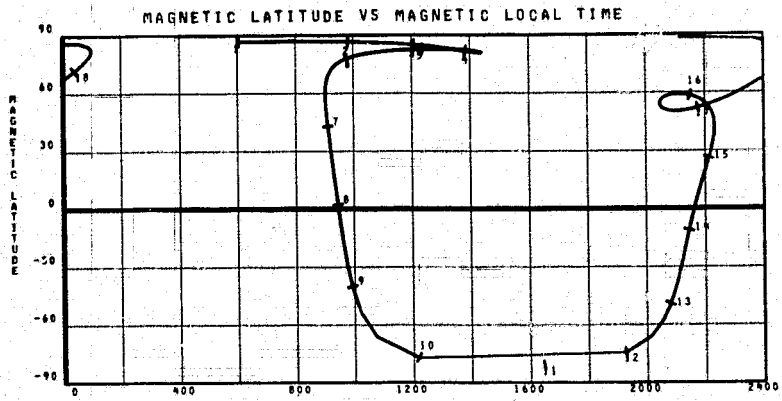
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/225/ 2.00H TO 1976/227/ 3.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

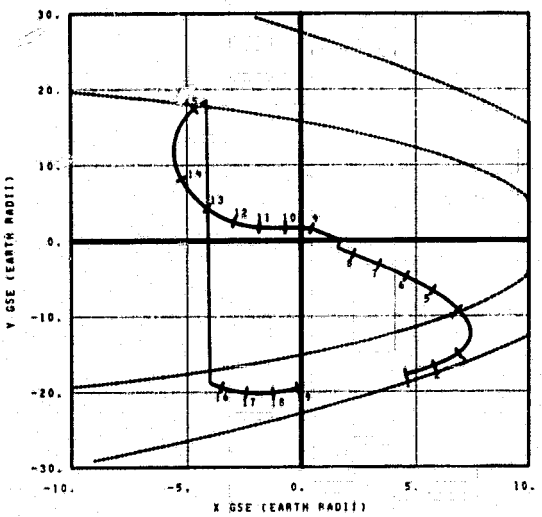
1 - 1976/225/	2.17H	R=	17.9R_E	8 - 1976/225/	15.67H	R=	2.1R_E	15 - 1976/225/	20.33H	R=	8.9R_E
2 - 1976/225/	5.17H	R=	16.0R_E	9 - 1976/225/	16.00H	R=	1.7R_E	16 - 1976/226/	3.00H	R=	19.3R_E
3 - 1976/225/	9.17H	R=	16.2R_E	10 - 1976/225/	16.25H	R=	1.7R_E	17 - 1976/226/	15.00H	R=	20.1R_E
4 - 1976/225/	6.33H	R=	14.6R_E	11 - 1976/225/	16.33H	R=	1.8R_E	18 - 1976/226/	22.00H	R=	19.9R_E
5 - 1976/225/	11.33H	R=	9.6R_E	12 - 1976/225/	16.92H	R=	2.0R_E				
6 - 1976/225/	12.83H	R=	7.3R_E	13 - 1976/225/	16.75H	R=	2.5R_E				
7 - 1976/225/	15.00H	R=	3.9R_E	14 - 1976/225/	17.50H	R=	4.3R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/225 / 2.00H TO1976/227 / 3.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/227/	3.50 H	LAT=	76.6	11 - 1976/227/	19.95 H	LAT=	-19.9
2 - 1976/227/	5.00 H	LAT=	74.8	12 - 1976/227/	20.95 H	LAT=	12.3
3 - 1976/227/	7.00 H	LAT=	72.1	13 - 1976/227/	21.67 H	LAT=	33.6
4 - 1976/227/	13.00 H	LAT=	59.1	14 - 1976/228/	0.17 H	LAT=	52.0
5 - 1976/227/	15.17 H	LAT=	49.8	15 - 1976/228/	10.67 H	LAT=	74.0
6 - 1976/227/	16.50 H	LAT=	39.1	16 - 1976/228/	15.67 H	LAT=	79.5
7 - 1976/227/	17.67 H	LAT=	23.6	17 - 1976/228/	19.67 H	LAT=	81.6
8 - 1976/227/	18.50 H	LAT=	-3.7	18 - 1976/228/	23.67 H	LAT=	81.7
9 - 1976/227/	19.33 H	LAT=	-81.1	19 - 1976/229/	3.17 H	LAT=	79.8
10 - 1976/227/	19.95 H	LAT=	-59.3				

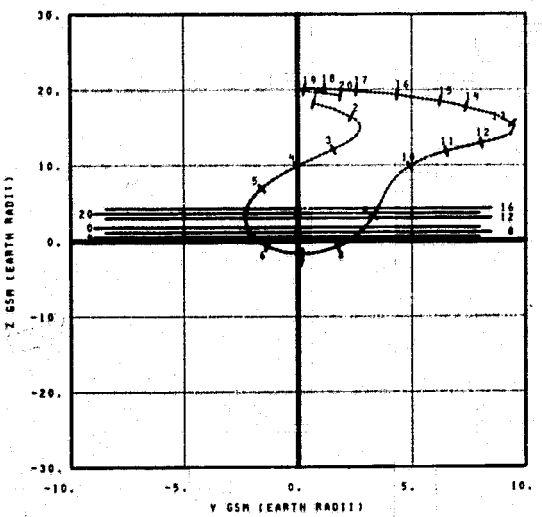
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/227/ 3.00H TO 1976/229/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/227/	3.50 H	R=	10.2 R_E	11 - 1976/228/	5.00 H	R=	14.6 R_E
2 - 1976/227/	5.00 H	R=	16.7 R_E	12 - 1976/228/	7.17 H	R=	16.1 R_E
3 - 1976/227/	11.83 H	R=	12.6 R_E	13 - 1976/228/	12.17 H	R=	18.7 R_E
4 - 1976/227/	13.83 H	R=	10.5 R_E	14 - 1976/228/	15.17 H	R=	19.6 R_E
5 - 1976/227/	15.67 H	R=	8.1 R_E	15 - 1976/228/	16.17 H	R=	19.8 R_E
6 - 1976/227/	16.83 H	R=	2.2 R_E	16 - 1976/228/	17.67 H	R=	20.1 R_E
7 - 1976/227/	19.42 H	R=	1.7 R_E	17 - 1976/228/	19.17 H	R=	20.2 R_E
8 - 1976/227/	20.05 H	R=	2.8 R_E	18 - 1976/228/	20.67 H	R=	20.2 R_E
9 - 1976/227/	21.83 H	R=	6.3 R_E	19 - 1976/229/	0.67 H	R=	20.0 R_E
10 - 1976/228/	2.50 H	R=	12.4 R_E	20 - 1976/229/	3.67 H	R=	19.3 R_E

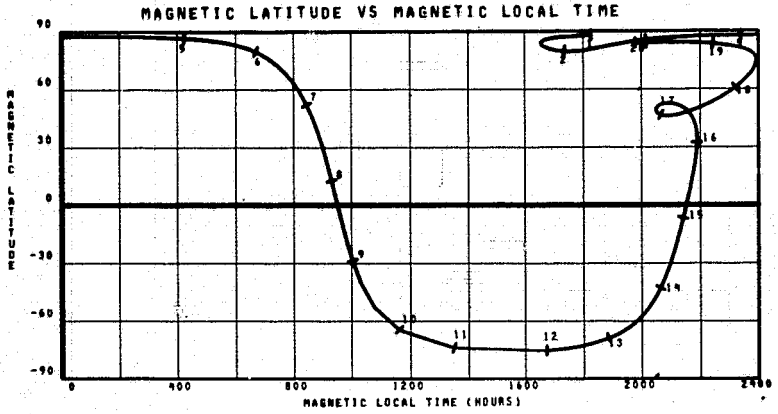
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/227/ 3.00H TO 1976/229/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

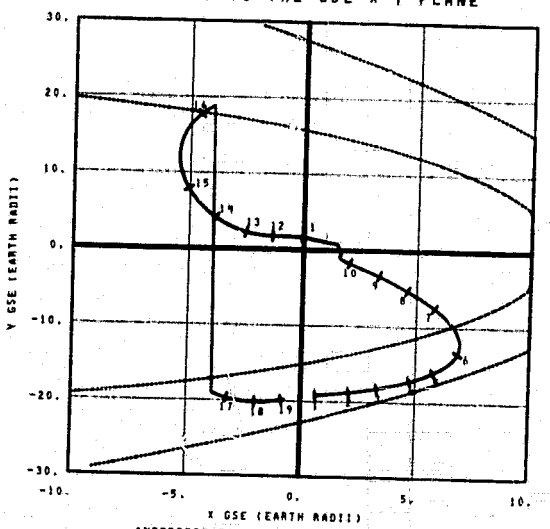
1 - 1976/227/	3.50 H	R=	10.2 R_E	8 - 1976/227/	19.67 H	R=	2.6 R_E	15 - 1976/227/	20.67 H	R=	4.0 R_E
2 - 1976/227/	5.00 H	R=	16.7 R_E	9 - 1976/227/	19.83 H	R=	1.8 R_E	16 - 1976/227/	23.17 H	R=	6.4 R_E
3 - 1976/227/	11.83 H	R=	12.6 R_E	10 - 1976/227/	19.33 H	R=	1.7 R_E	17 - 1976/228/	10.67 H	R=	16.1 R_E
4 - 1976/227/	13.67 H	R=	10.7 R_E	11 - 1976/227/	19.42 H	R=	1.7 R_E	18 - 1976/228/	14.67 H	R=	20.0 R_E
5 - 1976/227/	15.33 H	R=	8.3 R_E	12 - 1976/227/	19.50 H	R=	1.8 R_E	19 - 1976/229/	2.17 H	R=	19.7 R_E
6 - 1976/227/	16.50 H	R=	2.3 R_E	13 - 1976/227/	19.58 H	R=	1.9 R_E	20 - 1976/229/	5.67 H	R=	19.3 R_E
7 - 1976/227/	17.67 H	R=	4.0 R_E	14 - 1976/227/	19.67 H	R=	2.4 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/227 / 3.00H TO19976/229 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/229/	9.17H	LAT=	79.0	11 - 1976/229/	22.50H	LAT=	-77.0
2 - 1976/229/	9.17H	LAT=	78.1	12 - 1976/229/	23.00H	LAT=	-27.2
3 - 1976/229/	6.17H	LAT=	77.2	13 - 1976/229/	23.50H	LAT=	5.1
4 - 1976/229/	7.67H	LAT=	75.5	14 - 1976/230/	0.67H	LAT=	30.9
5 - 1976/229/	9.17H	LAT=	73.4	15 - 1976/230/	3.00H	LAT=	59.4
6 - 1976/229/	12.17H	LAT=	69.0	16 - 1976/230/	14.50H	LAT=	75.5
7 - 1976/229/	17.83H	LAT=	52.7	17 - 1976/230/	20.00H	LAT=	80.3
8 - 1976/229/	19.50H	LAT=	41.2	18 - 1976/231/	0.50H	LAT=	81.9
9 - 1976/229/	20.83H	LAT=	24.5	19 - 1976/231/	9.50H	LAT=	81.0
10 - 1976/229/	21.83H	LAT=	-10.9				

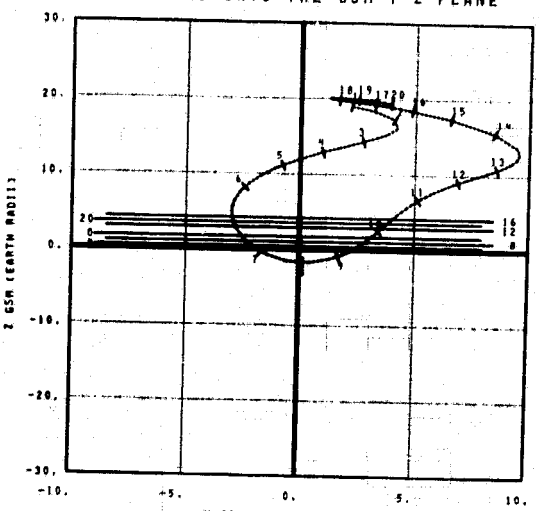
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/229/ 9.00H TO 1976/231/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/229/	9.17H	R=	19.2RE	11 - 1976/230/	3.50H	R=	9.9RE
2 - 1976/229/	7.67H	R=	17.0RE	12 - 1976/230/	6.00H	R=	12.7RE
3 - 1976/229/	12.50H	R=	14.0RE	13 - 1976/230/	8.50H	R=	14.8RE
4 - 1976/229/	14.33H	R=	13.3RE	14 - 1976/230/	14.50H	R=	14.8RE
5 - 1976/229/	16.00H	R=	11.7RE	15 - 1976/230/	16.50H	R=	18.3RE
6 - 1976/229/	18.00H	R=	9.3RE	16 - 1976/230/	18.00H	R=	19.1RE
7 - 1976/229/	21.83H	R=	2.6RE	17 - 1976/230/	19.50H	R=	19.9RE
8 - 1976/229/	22.50H	R=	1.7RE	18 - 1976/230/	21.50H	R=	19.8RE
9 - 1976/229/	23.10H	R=	2.6RE	19 - 1976/231/	3.00H	R=	20.1RE
10 - 1976/230/	0.75H	R=	5.8RE	20 - 1976/231/	9.00H	R=	19.8RE

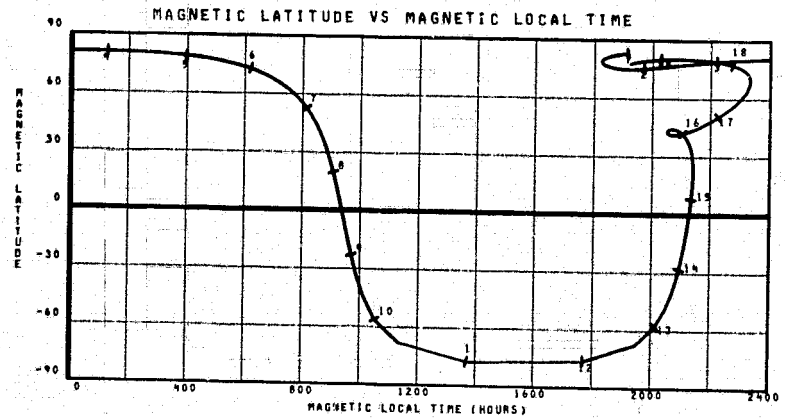
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/229/ 9.00H TO 1976/231/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

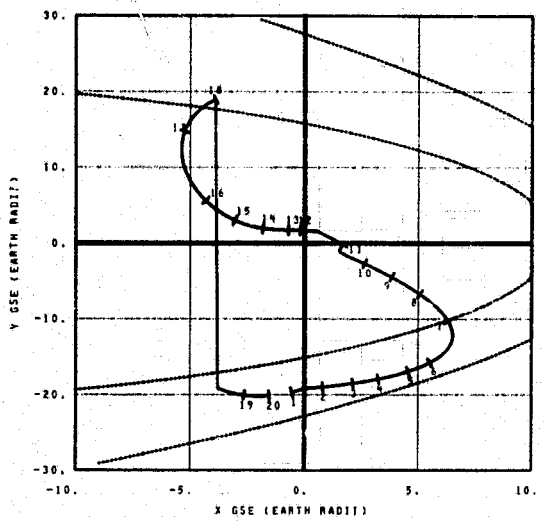
1 - 1976/229/	9.17H	R=	19.2RE	8 - 1976/229/	21.50H	R=	3.2RE
2 - 1976/229/	11.17H	R=	15.6RE	9 - 1976/229/	22.17H	R=	2.0RE
3 - 1976/229/	14.17H	R=	13.9RE	10 - 1976/229/	22.42H	R=	1.7RE
4 - 1976/229/	15.83H	R=	11.8RE	11 - 1976/229/	22.58H	R=	1.7RE
5 - 1976/229/	17.00H	R=	10.5RE	12 - 1976/229/	22.83H	R=	1.7RE
6 - 1976/229/	18.33H	R=	8.8RE	13 - 1976/229/	23.00H	R=	1.7RE
7 - 1976/229/	20.33H	R=	5.7RE	14 - 1976/229/	23.17H	R=	2.0RE
				15 - 1976/230/	0.08H	R=	4.9RE
				16 - 1976/230/	3.83H	R=	10.3RE
				17 - 1976/230/	17.50H	R=	19.9RE
				18 - 1976/231/	1.00H	R=	20.3RE
				19 - 1976/231/	3.50H	R=	20.0RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/229 / 9.00H TO 1976/231 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/231/	5.50 H	LAT=	80.4	11 - 1976/232/	1.67 H	LAT=	-77.3
2 - 1976/231/	8.00 H	LAT=	78.5	12 - 1976/232/	1.83 H	LAT=	-71.4
3 - 1976/231/	9.00 H	LAT=	77.4	13 - 1976/232/	2.00 H	LAT=	-49.2
4 - 1976/231/	10.00 H	LAT=	76.6	14 - 1976/232/	2.43 H	LAT=	-10.7
5 - 1976/231/	11.50 H	LAT=	74.8	15 - 1976/232/	3.20 H	LAT=	18.5
6 - 1976/231/	13.00 H	LAT=	72.9	16 - 1976/232/	4.75 H	LAT=	48.9
7 - 1976/231/	16.83 H	LAT=	61.1	17 - 1976/232/	12.83 H	LAT=	68.7
8 - 1976/231/	21.83 H	LAT=	48.5	18 - 1976/232/	21.67 H	LAT=	78.3
9 - 1976/231/	23.42 H	LAT=	39.6	19 - 1976/233/	1.67 H	LAT=	81.5
10 - 1976/232/	0.50 H	LAT=	13.3	20 - 1976/233/	4.67 H	LAT=	81.7

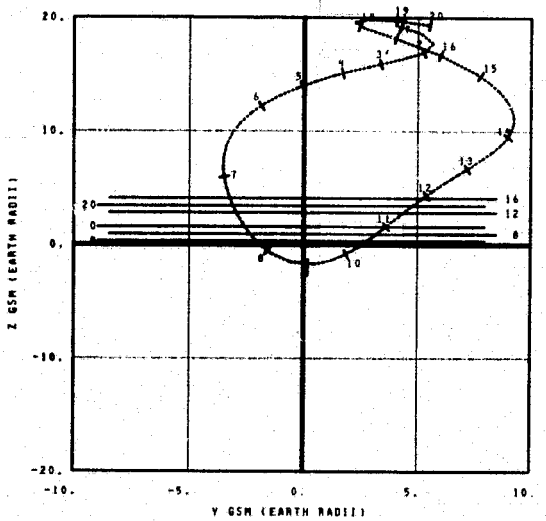
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/231/ 5.00H TO 1976/233/ 6.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/231/	5.50 H	R=	19.7 R_E	11 - 1976/232/	3.75 H	R=	5.4 R_E
2 - 1976/231/	11.00 H	R=	17.6 R_E	12 - 1976/232/	5.50 H	R=	8.9 R_E
3 - 1976/231/	13.50 H	R=	16.4 R_E	13 - 1976/232/	7.75 H	R=	11.1 R_E
4 - 1976/231/	15.00 H	R=	15.4 R_E	14 - 1976/232/	10.83 H	R=	14.1 R_E
5 - 1976/231/	16.50 H	R=	14.2 R_E	15 - 1976/232/	15.83 H	R=	17.5 R_E
6 - 1976/231/	18.17 H	R=	12.7 R_E	16 - 1976/232/	17.67 H	R=	18.3 R_E
7 - 1976/231/	22.33 H	R=	7.7 R_E	17 - 1976/232/	19.67 H	R=	19.1 R_E
8 - 1976/232/	1.17 H	R=	2.4 R_E	18 - 1976/232/	22.17 H	R=	19.7 R_E
9 - 1976/232/	1.83 H	R=	1.7 R_E	19 - 1976/233/	3.67 H	R=	20.3 R_E
10 - 1976/232/	2.50 H	R=	2.8 R_E	20 - 1976/233/	5.67 H	R=	20.2 R_E

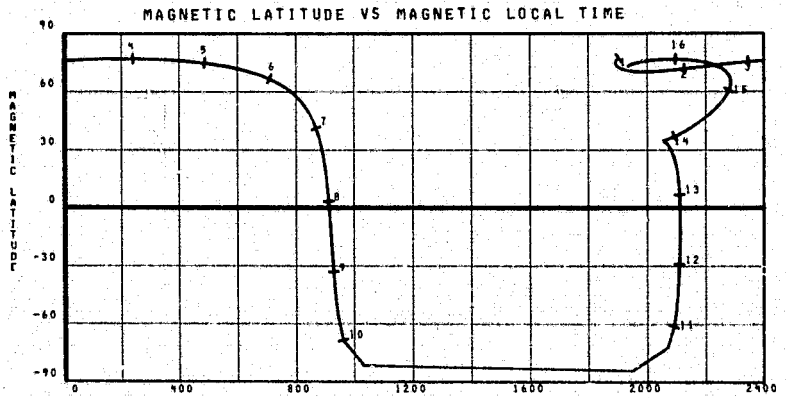
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/231/ 5.00H TO 1976/233/ 6.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

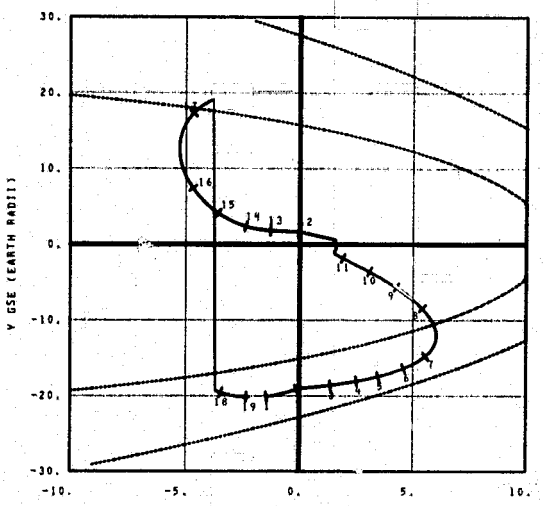
1 - 1976/231/	5.50 H	R=	19.7 R_E	8 - 1976/232/	1.00 H	R=	2.5 R_E	15 - 1976/232/	21.17 H	R=	19.5 R_E
2 - 1976/231/	13.50 H	R=	16.4 R_E	9 - 1976/232/	1.42 H	R=	1.9 R_E	16 - 1976/233/	2.67 H	R=	20.3 R_E
3 - 1976/231/	14.00 H	R=	14.6 R_E	10 - 1976/232/	1.67 H	R=	1.7 R_E				
4 - 1976/231/	18.66 H	R=	12.9 R_E	11 - 1976/232/	2.00 H	R=	1.9 R_E				
5 - 1976/231/	19.50 H	R=	11.3 R_E	12 - 1976/232/	2.33 H	R=	2.5 R_E				
6 - 1976/231/	21.33 H	R=	9.1 R_E	13 - 1976/232/	3.22 H	R=	5.4 R_E				
7 - 1976/231/	23.83 H	R=	5.1 R_E	14 - 1976/232/	13.17 H	R=	13.9 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/231 / 5.00H TO1976/233 / 6.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/233/	6.17 H	LAT=	81.6	11 - 1976/234/	9.25 H	LAT=	-10.5
2 - 1976/233/	10.67 H	LAT=	79.1	12 - 1976/234/	9.00 H	LAT=	-77.3
3 - 1976/233/	12.17 H	LAT=	77.7	13 - 1976/234/	5.42 H	LAT=	-27.4
4 - 1976/233/	13.17 H	LAT=	76.7	14 - 1976/234/	5.95 H	LAT=	4.4
5 - 1976/233/	14.17 H	LAT=	75.6	15 - 1976/234/	7.08 H	LAT=	29.3
6 - 1976/233/	15.67 H	LAT=	73.7	16 - 1976/234/	9.08 H	LAT=	68.3
7 - 1976/233/	17.67 H	LAT=	70.7	17 - 1976/234/	20.00 H	LAT=	74.3
8 - 1976/233/	23.83 H	LAT=	54.8	18 - 1976/235/	2.08 H	LAT=	79.9
9 - 1976/234/	1.92 H	LAT=	42.2	19 - 1976/235/	6.50 H	LAT=	81.8
10 - 1976/234/	3.25 H	LAT=	24.8				

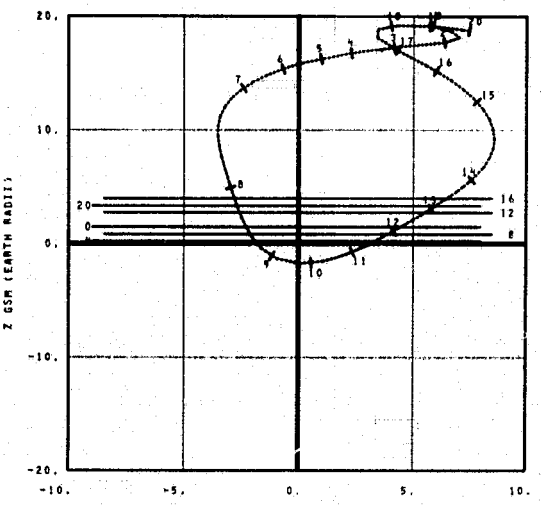
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/233/ 6.00H TO 1976/235/ 7.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/233/	6.17 H	R=	20.1 R_E	11 - 1976/234/	9.97 H	R=	3.4 R_E
2 - 1976/233/	11.67 H	R=	18.8 R_E	12 - 1976/234/	7.08 H	R=	5.6 R_E
3 - 1976/233/	14.17 H	R=	17.8 R_E	13 - 1976/234/	8.58 H	R=	7.9 R_E
4 - 1976/233/	15.67 H	R=	17.0 R_E	14 - 1976/234/	10.58 H	R=	10.7 R_E
5 - 1976/233/	16.67 H	R=	16.4 R_E	15 - 1976/234/	14.00 H	R=	15.6 R_E
6 - 1976/233/	18.00 H	R=	15.5 R_E	16 - 1976/234/	18.33 H	R=	17.1 R_E
7 - 1976/233/	19.83 H	R=	14.1 R_E	17 - 1976/234/	20.50 H	R=	18.1 R_E
8 - 1976/234/	2.25 H	R=	6.5 R_E	18 - 1976/235/	2.00 H	R=	19.9 R_E
9 - 1976/234/	4.67 H	R=	1.9 R_E	19 - 1976/235/	4.50 H	R=	20.2 R_E
10 - 1976/234/	5.25 H	R=	1.9 R_E	20 - 1976/235/	7.00 H	R=	20.3 R_E

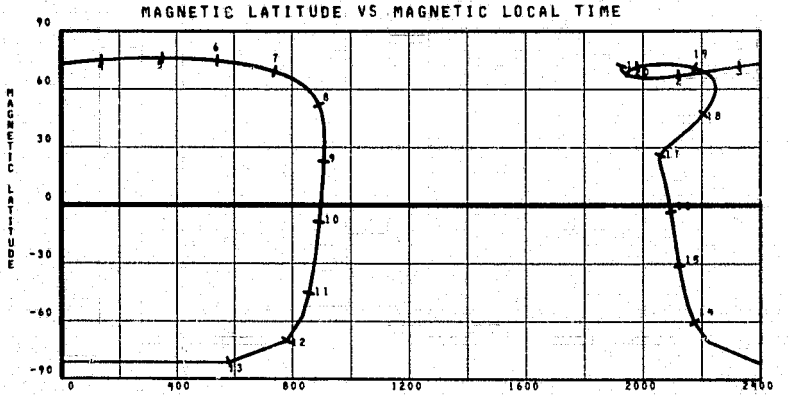
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/233/ 6.00H TO 1976/235/ 7.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

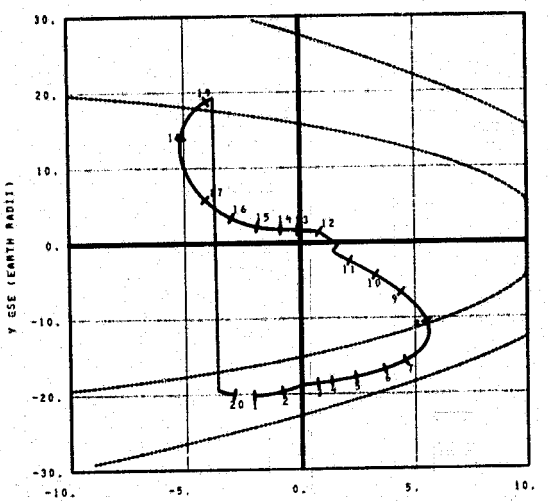
1 - 1976/233/	6.17 H	R=	20.1 R_E	8 - 1976/234/	2.17 H	R=	6.7 R_E	15 - 1976/234/	5.58 H	R=	2.6 R_E
2 - 1976/233/	11.67 H	R=	18.0 R_E	9 - 1976/234/	3.83 H	R=	3.5 R_E	16 - 1976/234/	6.25 H	R=	4.1 R_E
3 - 1976/233/	14.67 H	R=	16.9 R_E	10 - 1976/234/	4.42 H	R=	2.3 R_E	17 - 1976/234/	11.00 H	R=	11.2 R_E
4 - 1976/233/	16.67 H	R=	15.9 R_E	11 - 1976/234/	4.75 H	R=	1.0 R_E	18 - 1976/234/	18.67 H	R=	17.3 R_E
5 - 1976/233/	20.17 H	R=	13.8 R_E	12 - 1976/234/	4.92 H	R=	1.7 R_E	19 - 1976/235/	1.00 H	R=	19.7 R_E
6 - 1976/235/	21.50 H	R=	12.6 R_E	13 - 1976/234/	5.00 H	R=	1.7 R_E	20 - 1976/235/	4.50 H	R=	20.2 R_E
7 - 1976/233/	23.33 H	R=	10.6 R_E	14 - 1976/234/	5.25 H	R=	1.9 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/233 / 6.00H TO1976/235 / 7.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/235/	7.50 H	LAT=	81.9	11 - 1976/236/	7.17 H	LAT=	4.9
2 - 1976/235/	12.00 H	LAT=	80.5	12 - 1976/236/	8.17 H	LAT=	-61.4
3 - 1976/235/	15.50 H	LAT=	77.7	13 - 1976/236/	8.25 H	LAT=	-72.1
4 - 1976/235/	16.00 H	LAT=	77.2	14 - 1976/236/	8.50 H	LAT=	-39.9
5 - 1976/235/	17.00 H	LAT=	76.1	15 - 1976/236/	8.92 H	LAT=	-6.0
6 - 1976/235/	18.50 H	LAT=	74.3	16 - 1976/236/	9.70 H	LAT=	20.3
7 - 1976/235/	20.00 H	LAT=	72.2	17 - 1976/236/	11.17 H	LAT=	48.9
8 - 1976/236/	1.50 H	LAT=	60.6	18 - 1976/236/	16.17 H	LAT=	66.7
9 - 1976/236/	4.50 H	LAT=	46.6	19 - 1976/237/	2.67 H	LAT=	77.9
10 - 1976/236/	6.00 H	LAT=	31.5	20 - 1976/237/	7.67 H	LAT=	81.2

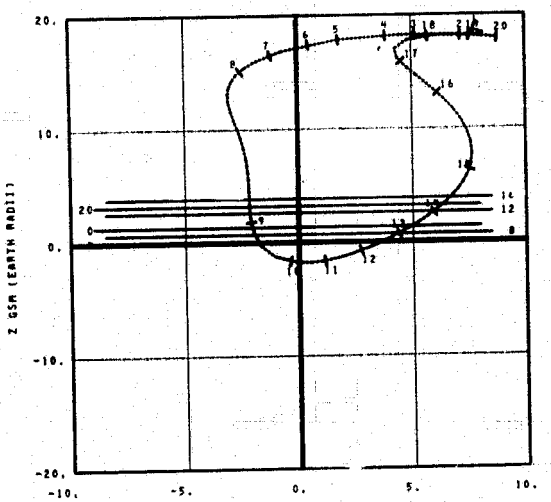
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/235/ 7.00H TO 1976/237/ 8.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/235/	7.50 H	R=	20.3 R_E	11 - 1976/236/	8.73 H	R=	2.4 R_E
2 - 1976/235/	12.50 H	R=	19.6 R_E	12 - 1976/236/	9.38 H	R=	3.8 R_E
3 - 1976/235/	14.50 H	R=	19.0 R_E	13 - 1976/236/	10.33 H	R=	5.7 R_E
4 - 1976/235/	15.50 H	R=	18.6 R_E	14 - 1976/236/	11.58 H	R=	7.8 R_E
5 - 1976/235/	17.00 H	R=	18.0 R_E	15 - 1976/236/	14.08 H	R=	11.0 R_E
6 - 1976/235/	18.00 H	R=	17.5 R_E	16 - 1976/236/	18.83 H	R=	15.9 R_E
7 - 1976/235/	19.50 H	R=	16.4 R_E	17 - 1976/236/	21.83 H	R=	17.2 R_E
8 - 1976/235/	21.33 H	R=	15.4 R_E	18 - 1976/237/	3.17 H	R=	19.4 R_E
9 - 1976/236/	7.00 H	R=	3.6 R_E	19 - 1976/237/	5.67 H	R=	19.9 R_E
10 - 1976/236/	8.25 H	R=	1.7 R_E	20 - 1976/237/	7.67 H	R=	20.2 R_E

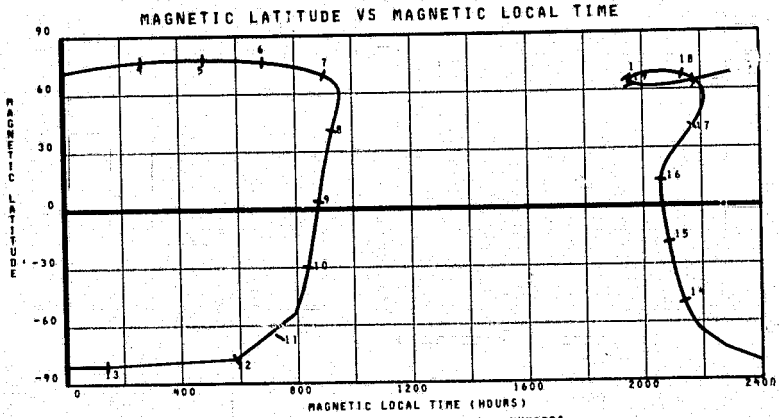
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/235/ 7.00H TO 1976/237/ 8.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

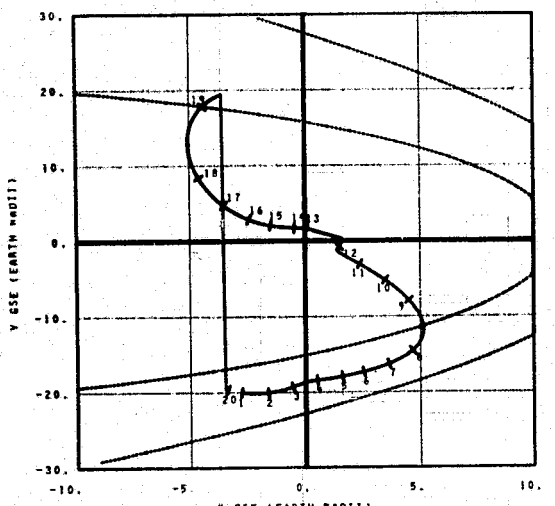
1 - 1976/235/	7.50 H	R=	20.3 R_E	8 - 1976/236/	9.67 H	R=	9.3 R_E	15 - 1976/236/	9.28 H	R=	3.6 R_E
2 - 1976/235/	15.00 H	R=	18.0 R_E	9 - 1976/236/	7.50 H	R=	2.4 R_E	16 - 1976/236/	11.92 H	R=	8.3 R_E
3 - 1976/235/	18.00 H	R=	17.5 R_E	10 - 1976/236/	7.92 H	R=	1.8 R_E	17 - 1976/236/	18.33 H	R=	15.9 R_E
4 - 1976/235/	21.00 H	R=	15.7 R_E	11 - 1976/236/	8.17 H	R=	1.7 R_E	18 - 1976/237/	1.17 H	R=	18.7 R_E
5 - 1976/235/	22.50 H	R=	14.6 R_E	12 - 1976/236/	8.25 H	R=	1.7 R_E	19 - 1976/237/	7.67 H	R=	20.2 R_E
6 - 1976/235/	24.00 H	R=	13.3 R_E	13 - 1976/236/	8.33 H	R=	1.8 R_E				
7 - 1976/236/	2.67 H	R=	10.3 R_E	14 - 1976/236/	8.67 H	R=	2.3 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/235 / 7.00H TO1976/237 / 8.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/237/	8.17H	LAT=	81.9	11 - 1976/238/	10.00H	LAT=	15.4
2 - 1976/237/	12.67H	LAT=	81.6	12 - 1976/238/	11.25H	LAT=	-70.4
3 - 1976/237/	16.67H	LAT=	79.9	13 - 1976/238/	11.42H	LAT=	-78.0
4 - 1976/237/	19.17H	LAT=	77.3	14 - 1976/238/	11.58H	LAT=	-55.3
5 - 1976/237/	20.17H	LAT=	76.2	15 - 1976/238/	12.00H	LAT=	-14.7
6 - 1976/237/	21.17H	LAT=	75.0	16 - 1976/238/	12.57H	LAT=	11.9
7 - 1976/237/	22.67H	LAT=	73.1	17 - 1976/238/	13.67H	LAT=	33.0
8 - 1976/238/	0.83H	LAT=	69.6	18 - 1976/238/	16.00H	LAT=	51.3
9 - 1976/238/	7.00H	LAT=	51.5	19 - 1976/239/	3.50H	LAT=	75.5
10 - 1976/238/	8.83H	LAT=	37.6	20 - 1976/239/	9.00H	LAT=	80.2

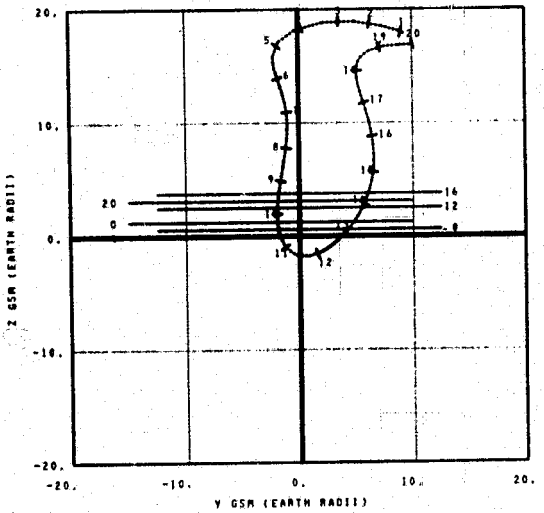
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/237/ 8.00H TO 1976/239/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/237/	8.17H	R=	20.2R_E	11 - 1976/238/	11.17H	R=	1.8R_E
2 - 1976/237/	12.67H	R=	19.8R_E	12 - 1976/238/	12.08H	R=	2.7R_E
3 - 1976/237/	16.67H	R=	19.3R_E	13 - 1976/238/	13.25H	R=	5.1R_E
4 - 1976/237/	19.17H	R=	18.4R_E	14 - 1976/238/	14.67H	R=	7.6R_E
5 - 1976/237/	22.17H	R=	17.0R_E	15 - 1976/238/	16.25H	R=	9.8R_E
6 - 1976/238/	2.17H	R=	14.2R_E	16 - 1976/238/	18.17H	R=	12.0R_E
7 - 1976/238/	5.17H	R=	11.3R_E	17 - 1976/238/	20.33H	R=	14.0R_E
8 - 1976/238/	7.50H	R=	8.4R_E	18 - 1976/238/	23.33H	R=	16.2R_E
9 - 1976/238/	9.00H	R=	5.8R_E	19 - 1976/239/	4.00H	R=	18.4R_E
10 - 1976/238/	10.25H	R=	3.5R_E	20 - 1976/239/	9.00H	R=	20.0R_E

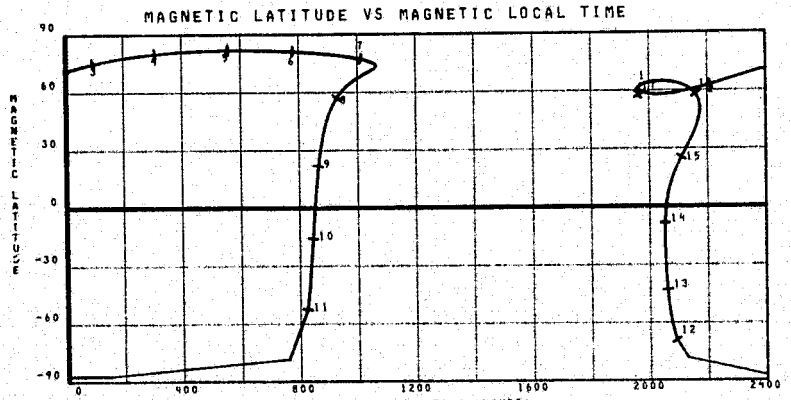
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/237/ 8.00H TO 1976/239/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

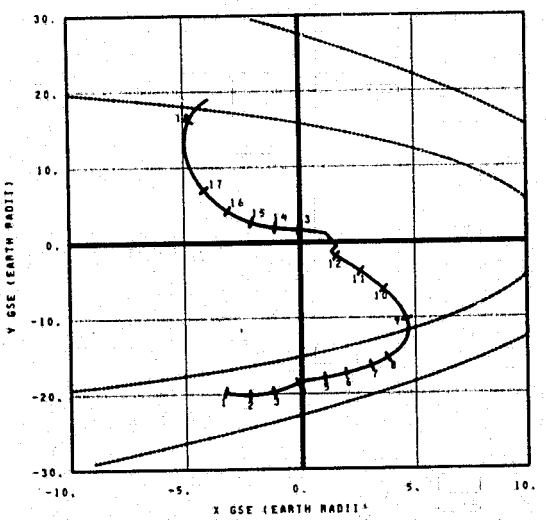
1 - 1976/237/	8.17H	R=	20.2R_E	8 - 1976/238/	9.50H	R=	5.1R_E	15 - 1976/238/	16.92H	R=	10.6R_E
2 - 1976/237/	16.17H	R=	19.4R_E	9 - 1976/238/	10.67H	R=	2.7R_E	16 - 1976/238/	23.33H	R=	16.2R_E
3 - 1976/237/	20.67H	R=	17.7R_E	10 - 1976/238/	11.00H	R=	1.9R_E	17 - 1976/239/	8.00H	R=	19.0R_E
4 - 1976/237/	22.67H	R=	16.2R_E	11 - 1976/238/	11.33H	R=	1.7R_E				
5 - 1976/238/	0.17H	R=	15.1R_E	12 - 1976/238/	11.75H	R=	2.1R_E				
6 - 1976/238/	1.50H	R=	14.1R_E	13 - 1976/238/	12.08H	R=	2.7R_E				
7 - 1976/238/	4.00H	R=	12.5R_E	14 - 1976/238/	13.17H	R=	5.0R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/237 / 8.00H TO1976/239 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/239/	9.50 H	LAT=	80.5	11 - 1976/240/	12.92 H	LAT=	24.7
2 - 1976/239/	14.00 H	LAT=	81.9	12 - 1976/240/	14.00 H	LAT=	-17.9
3 - 1976/239/	18.00 H	LAT=	80.7	13 - 1976/240/	14.67 H	LAT=	-73.2
4 - 1976/239/	22.00 H	LAT=	77.7	14 - 1976/240/	15.35 H	LAT=	-27.2
5 - 1976/239/	23.50 H	LAT=	76.1	15 - 1976/240/	15.60 H	LAT=	5.2
6 - 1976/240/	0.50 H	LAT=	74.9	16 - 1976/240/	16.52 H	LAT=	27.0
7 - 1976/240/	2.00 H	LAT=	72.9	17 - 1976/240/	18.25 H	LAT=	45.4
8 - 1976/240/	3.33 H	LAT=	70.9	18 - 1976/241/	3.50 H	LAT=	71.4
9 - 1976/240/	8.50 H	LAT=	58.9				
10 - 1976/240/	11.50 H	LAT=	43.0				

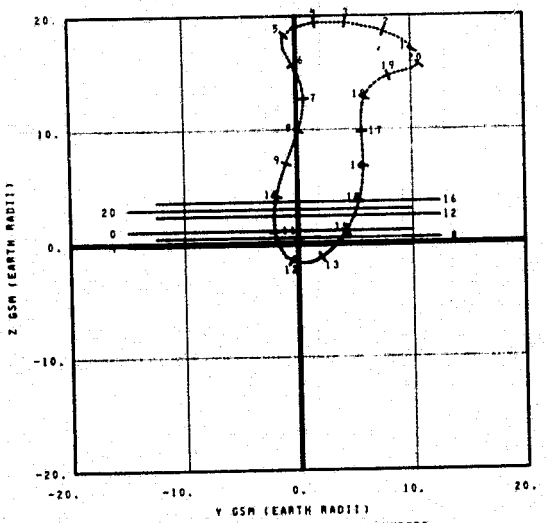
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/239/ 9.00H TO 1976/241/10.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/239/	9.50 H	R=	20.0 R_E	11 - 1976/240/	13.75 H	R=	2.9 R_E
2 - 1976/239/	14.00 H	R=	20.2 R_E	12 - 1976/240/	14.50 H	R=	1.7 R_E
3 - 1976/239/	17.00 H	R=	20.0 R_E	13 - 1976/240/	15.40 H	R=	3.0 R_E
4 - 1976/239/	19.00 H	R=	19.5 R_E	14 - 1976/240/	16.52 H	R=	5.2 R_E
5 - 1976/239/	22.50 H	R=	18.4 R_E	15 - 1976/240/	17.92 H	R=	7.6 R_E
6 - 1976/240/	3.33 H	R=	15.7 R_E	16 - 1976/240/	19.50 H	R=	9.9 R_E
7 - 1976/240/	6.83 H	R=	12.9 R_E	17 - 1976/240/	21.67 H	R=	12.3 R_E
8 - 1976/240/	9.33 H	R=	10.2 R_E	18 - 1976/241/	0.67 H	R=	14.9 R_E
9 - 1976/240/	11.25 H	R=	7.6 R_E	19 - 1976/241/	9.50 H	R=	17.4 R_E
10 - 1976/240/	12.67 H	R=	5.2 R_E	20 - 1976/241/	9.67 H	R=	19.4 R_E

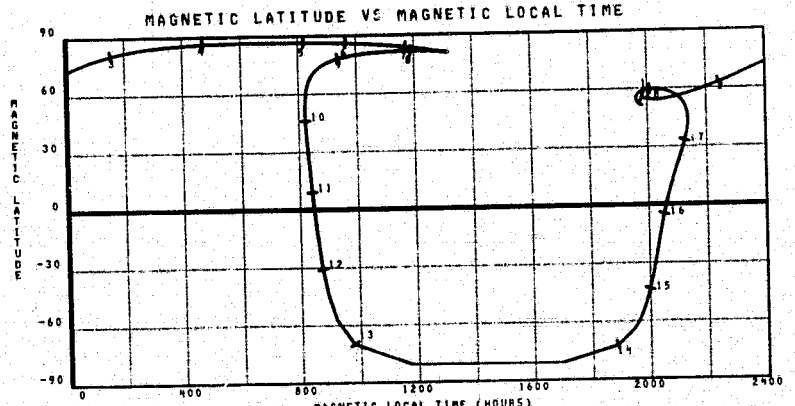
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/239/ 9.00H TO 1976/241/10.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

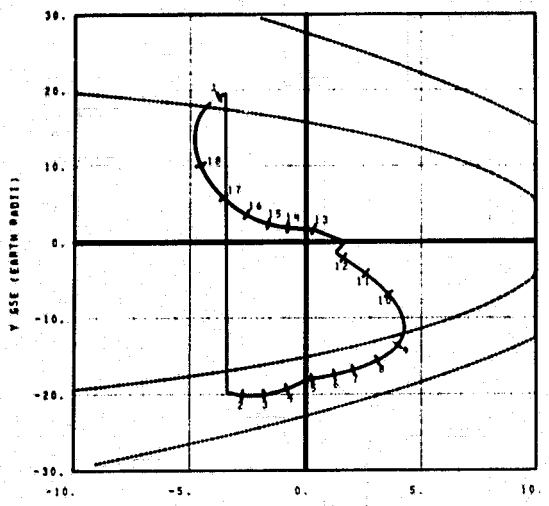
1 - 1976/239/	9.50 H	R=	20.0 R_E	8 - 1976/240/	9.67 H	R=	9.8 R_E	15 - 1976/240/	15.27 H	R=	2.7 R_E
2 - 1976/239/	17.25 H	R=	19.9 R_E	9 - 1976/240/	11.25 H	R=	7.6 R_E	16 - 1976/240/	16.38 H	R=	5.0 R_E
3 - 1976/239/	23.00 H	R=	18.2 R_E	10 - 1976/240/	13.42 H	R=	3.6 R_E	17 - 1976/240/	19.92 H	R=	10.3 R_E
4 - 1976/240/	1.00 H	R=	17.2 R_E	11 - 1976/240/	14.08 H	R=	2.0 R_E	18 - 1976/241/	3.50 H	R=	16.8 R_E
5 - 1976/240/	2.00 H	R=	16.6 R_E	12 - 1976/240/	14.42 H	R=	1.7 R_E				
6 - 1976/240/	2.50 H	R=	16.3 R_E	13 - 1976/240/	14.67 H	R=	1.7 R_E				
7 - 1976/240/	3.83 H	R=	15.4 R_E	14 - 1976/240/	14.92 H	R=	2.0 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/239 / 9.00H TO1976/241 /10.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/241/ 10.17H	LAT= 70.7	11 - 1976/242/ 16.00H	LAT= 27.2		
2 - 1976/241/ 15.17H	LAT= 81.6	12 - 1976/242/ 17.00H	LAT= -9.0		
3 - 1976/241/ 19.17H	LAT= 81.6	13 - 1976/242/ 17.83H	LAT= -76.9		
4 - 1976/241/ 23.17H	LAT= 79.5	14 - 1976/242/ 18.17H	LAT= -36.9		
5 - 1976/242/ 2.67H	LAT= 76.2	15 - 1976/242/ 18.50H	LAT= -9.1		
6 - 1976/242/ 3.67H	LAT= 75.0	16 - 1976/242/ 19.32H	LAT= 20.0		
7 - 1976/242/ 4.67H	LAT= 73.7	17 - 1976/242/ 20.67H	LAT= 39.1		
8 - 1976/242/ 6.33H	LAT= 71.3	18 - 1976/242/ 23.83H	LAT= 56.6		
9 - 1976/242/ 8.67H	LAT= 67.0				
10 - 1976/242/ 14.33H	LAT= 46.1				

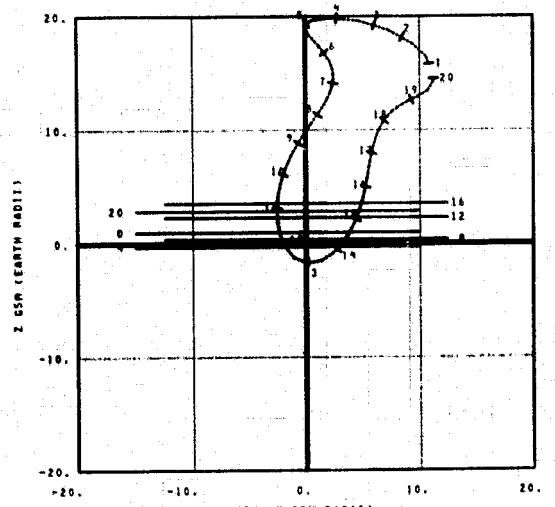
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/241/10.00H TO 1976/243/11.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/241/ 10.17H	R= 19.5RE	11 - 1976/242/ 16.17H	R= 4.6RE
2 - 1976/241/ 14.67H	R= 20.3RE	12 - 1976/242/ 17.17H	R= 2.9RE
3 - 1976/241/ 16.67H	R= 20.3RE	13 - 1976/242/ 17.92H	R= 1.7RE
4 - 1976/241/ 19.17H	R= 20.1RE	14 - 1976/242/ 18.00H	R= 3.4RE
5 - 1976/241/ 22.67H	R= 19.9RE	15 - 1976/242/ 20.00H	R= 5.7RE
6 - 1976/242/ 4.67H	R= 16.9RE	16 - 1976/242/ 21.50H	R= 8.2RE
7 - 1976/242/ 8.33H	R= 14.9RE	17 - 1976/242/ 23.50H	R= 10.8RE
8 - 1976/242/ 11.33H	R= 11.6RE	18 - 1976/243/ 2.33H	R= 13.7RE
9 - 1976/242/ 13.33H	R= 9.2RE	19 - 1976/243/ 6.00H	R= 16.9RE
10 - 1976/242/ 14.92H	R= 6.9RE	20 - 1976/243/ 11.00H	R= 18.8RE

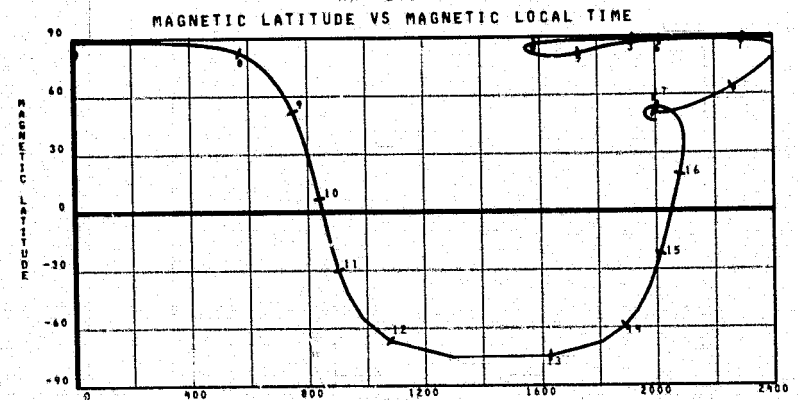
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/241/10.00H TO 1976/243/11.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

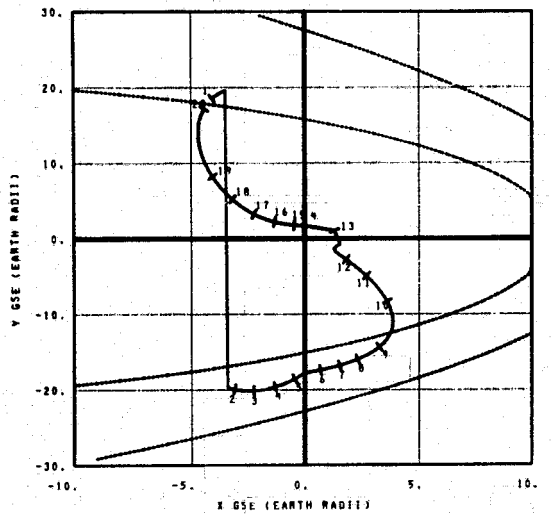
1 - 1976/241/ 10.17H	R= 19.5RE	8 - 1976/242/ 13.83H	R= 6.5RE	15 - 1976/242/ 18.72H	R= 3.2RE
2 - 1976/241/ 14.67H	R= 20.3RE	9 - 1976/242/ 16.25H	R= 4.4RE	16 - 1976/242/ 20.58H	R= 6.6RE
3 - 1976/242/ 2.17H	R= 18.2RE	10 - 1976/242/ 17.25H	R= 2.3RE	17 - 1976/243/ 3.53H	R= 14.5RE
4 - 1976/242/ 3.17H	R= 17.7RE	11 - 1976/242/ 17.58H	R= 1.8RE		
5 - 1976/242/ 4.83H	R= 15.1RE	12 - 1976/242/ 17.83H	R= 1.7RE		
6 - 1976/242/ 12.17H	R= 10.7RE	13 - 1976/242/ 18.00H	R= 1.8RE		
7 - 1976/242/ 12.50H	R= 10.3RE	14 - 1976/242/ 18.17H	R= 2.1RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/241/10.00H TO1976/243/11.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/243/ 11.50 H	LAT= 77.0	11 - 1976/244/ 10.83 H	LAT= 33.2		
2 - 1976/243/ 17.00 H	LAT= 81.0	12 - 1976/244/ 20.00 H	LAT= 9.7		
3 - 1976/243/ 21.00 H	LAT= 81.9	13 - 1976/244/ 21.00 H	LAT= -81.8		
4 - 1976/244/ 1.00 H	LAT= 80.5	14 - 1976/244/ 21.08 H	LAT= -73.7		
5 - 1976/244/ 4.50 H	LAT= 77.7	15 - 1976/244/ 21.25 H	LAT= -51.0		
6 - 1976/244/ 7.00 H	LAT= 74.9	16 - 1976/244/ 21.65 H	LAT= -13.6		
7 - 1976/244/ 8.00 H	LAT= 73.6	17 - 1976/244/ 22.20 H	LAT= 13.0		
8 - 1976/244/ 9.17 H	LAT= 71.9	18 - 1976/244/ 23.42 H	LAT= 34.3		
9 - 1976/244/ 11.17 H	LAT= 68.5	19 - 1976/245/ 1.42 H	LAT= 59.7		
10 - 1976/244/ 16.67 H	LAT= 51.5	20 - 1976/245/ 11.67 H	LAT= 73.6		

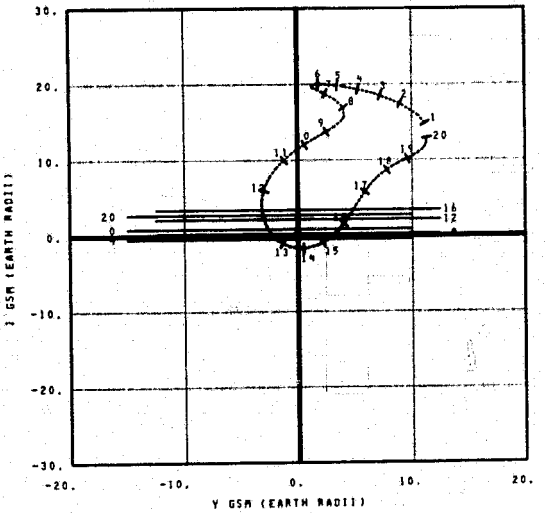
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/243/11.00H TO 1976/245/12.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/243/ 11.50 H	R= 19.0 RE	11 - 1976/244/ 15.67 H	R= 10.3 RE
2 - 1976/243/ 17.00 H	R= 19.9 RE	12 - 1976/244/ 18.00 H	R= 7.1 RE
3 - 1976/243/ 16.50 H	R= 20.1 RE	13 - 1976/244/ 20.67 H	R= 1.9 RE
4 - 1976/243/ 18.00 H	R= 20.3 RE	14 - 1976/244/ 21.17 H	R= 1.0 RE
5 - 1976/243/ 19.50 H	R= 20.3 RE	15 - 1976/244/ 21.72 H	R= 2.7 RE
6 - 1976/243/ 21.50 H	R= 20.2 RE	16 - 1976/244/ 22.00 H	R= 5.1 RE
7 - 1976/244/ 3.50 H	R= 18.9 RE	17 - 1976/245/ 1.42 H	R= 9.2 RE
8 - 1976/244/ 7.00 H	R= 17.4 RE	18 - 1976/245/ 4.33 H	R= 12.5 RE
9 - 1976/244/ 12.00 H	R= 14.0 RE	19 - 1976/245/ 6.83 H	R= 15.7 RE
10 - 1976/244/ 14.00 H	R= 12.2 RE	20 - 1976/245/ 11.67 H	R= 17.7 RE

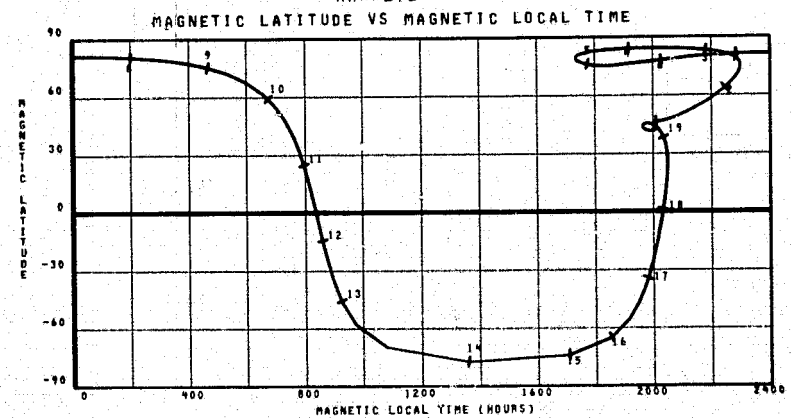
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/243/11.00H TO 1976/245/12.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

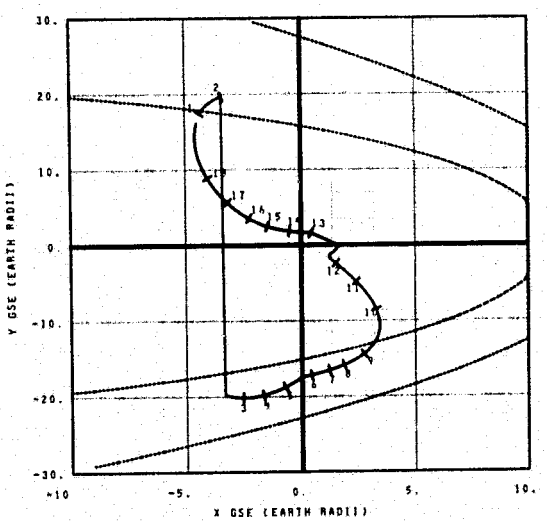
1 - 1976/243/ 11.50 H	R= 19.0 RE	8 - 1976/244/ 15.33 H	R= 10.7 RE	15 - 1976/244/ 21.17 H	R= 1.0 RE
2 - 1976/243/ 17.00 H	R= 20.0 RE	9 - 1976/244/ 15.67 H	R= 9.8 RE	16 - 1976/244/ 21.25 H	R= 1.9 RE
3 - 1976/244/ 1.00 H	R= 19.4 RE	10 - 1976/244/ 18.50 H	R= 6.2 RE	17 - 1976/244/ 21.97 H	R= 2.4 RE
4 - 1976/244/ 2.50 H	R= 19.2 RE	11 - 1976/244/ 20.00 H	R= 3.3 RE	18 - 1976/244/ 22.33 H	R= 4.1 RE
5 - 1976/244/ 7.50 H	R= 17.1 RE	12 - 1976/244/ 20.50 H	R= 2.1 RE	19 - 1976/245/ 1.33 H	R= 9.1 RE
6 - 1976/244/ 12.17 H	R= 13.9 RE	13 - 1976/244/ 20.83 H	R= 1.7 RE		
7 - 1976/244/ 14.00 H	R= 12.2 RE	14 - 1976/244/ 21.00 H	R= 1.7 RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/243 /11.00H TO1976/245 /12.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/245/ 12.17H	LAT= 74.2	11 - 1976/246/ 22.17H	LAT= 31.4		
2 - 1976/245/ 18.67H	LAT= 80.1	12 - 1976/246/ 23.92H	LAT= -4.3		
3 - 1976/245/ 23.17H	LAT= 81.9	13 - 1976/247/ 0.25H	LAT= -78.7		
4 - 1976/246/ 3.17H	LAT= 81.1	14 - 1976/247/ 0.50H	LAT= -45.7		
5 - 1976/246/ 7.17H	LAT= 78.2	15 - 1976/247/ 1.00H	LAT= -5.2		
6 - 1976/246/ 10.67H	LAT= 74.4	16 - 1976/247/ 1.42H	LAT= 17.0		
7 - 1976/246/ 11.67H	LAT= 73.0	17 - 1976/247/ 2.83H	LAT= 36.5		
8 - 1976/246/ 12.67H	LAT= 71.5	18 - 1976/247/ 5.08H	LAT= 51.8		
9 - 1976/246/ 14.50H	LAT= 68.3				
10 - 1976/246/ 19.83H	LAT= 51.8				

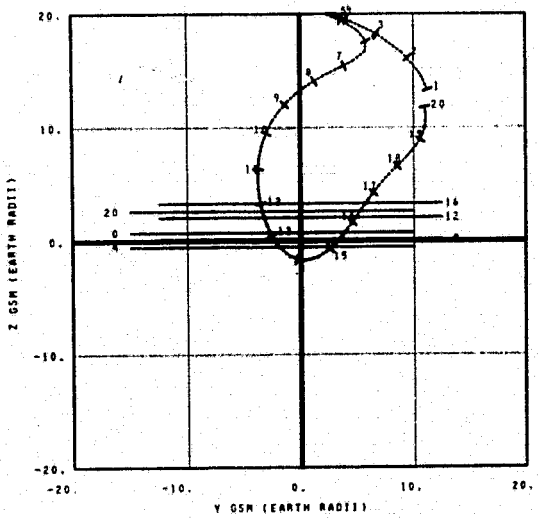
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/245/12.00H TO 1976/247/13.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/245/ 12.17H	R= 18.0RE	11 - 1976/246/ 20.83H	R= 7.6RE
2 - 1976/245/ 15.17H	R= 19.1RE	12 - 1976/246/ 22.25H	R= 5.2RE
3 - 1976/245/ 17.67H	R= 19.8RE	13 - 1976/246/ 23.33H	R= 3.0RE
4 - 1976/245/ 20.17H	R= 20.2RE	14 - 1976/247/ 0.17H	R= 1.7RE
5 - 1976/246/ 3.17H	R= 19.9RE	15 - 1976/247/ 1.00H	R= 3.1RE
6 - 1976/246/ 7.67H	R= 18.6RE	16 - 1976/247/ 2.33H	R= 9.6RE
7 - 1976/246/ 12.67H	R= 15.9RE	17 - 1976/247/ 4.17H	R= 8.5RE
8 - 1976/246/ 15.00H	R= 14.2RE	18 - 1976/247/ 6.67H	R= 11.6RE
9 - 1976/246/ 17.17H	R= 12.2RE	19 - 1976/247/ 9.83H	R= 14.6RE
10 - 1976/246/ 19.00H	R= 10.2RE	20 - 1976/247/ 13.00H	R= 16.7RE

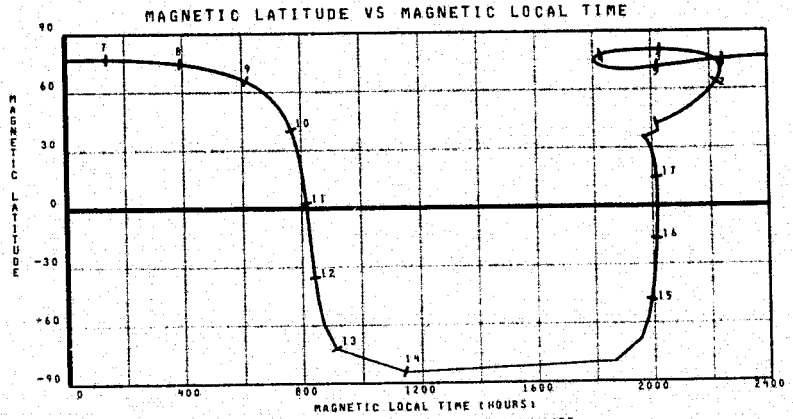
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/245/12.00H TO 1976/247/13.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

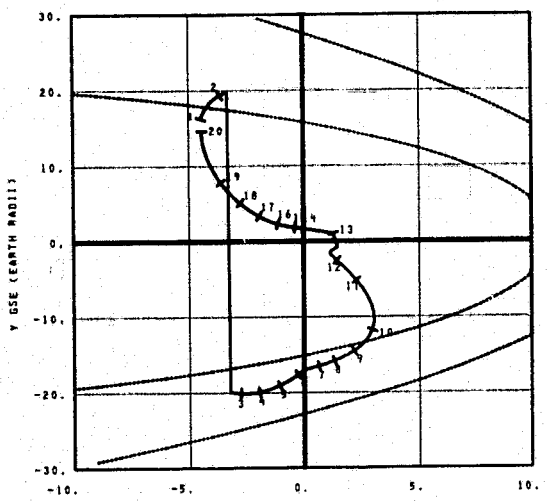
1 - 1976/245/ 12.17H	R= 18.0RE	8 - 1976/246/ 18.33H	R= 10.9RE
2 - 1976/245/ 20.17H	R= 20.2RE	9 - 1976/246/ 20.17H	R= 8.6RE
3 - 1976/246/ 1.67H	R= 20.1RE	10 - 1976/246/ 22.42H	R= 4.9RE
4 - 1976/246/ 4.17H	R= 19.6RE	11 - 1976/246/ 23.50H	R= 2.7RE
5 - 1976/246/ 12.17H	R= 16.3RE	12 - 1976/246/ 23.92H	R= 1.9RE
6 - 1976/246/ 14.83H	R= 14.3RE	13 - 1976/247/ 0.17H	R= 1.7RE
7 - 1976/246/ 16.83H	R= 12.9RE	14 - 1976/247/ 0.25H	R= 1.7RE
		15 - 1976/247/ 0.58H	R= 2.1RE
		16 - 1976/247/ 1.00H	R= 2.9RE
		17 - 1976/247/ 2.08H	R= 5.1RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/245 /12.00H TO1976/247 /13.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/247/ 13.17H	LAT=	71.3	11 - 1976/249/	1.25H	LAT=	33.3
2 - 1976/247/ 20.50H	LAT=	79.1	12 - 1976/249/	2.58H	LAT=	-2.0
3 - 1976/248/ 1.50H	LAT=	61.7	13 - 1976/249/	3.42H	LAT=	-81.0
4 - 1976/248/ 9.50H	LAT=	61.4	14 - 1976/249/	3.50H	LAT=	-73.2
5 - 1976/248/ 9.50H	LAT=	79.0	15 - 1976/249/	3.67H	LAT=	-58.6
6 - 1976/248/ 13.00H	LAT=	79.9	16 - 1976/249/	4.83H	LAT=	-19.6
7 - 1976/248/ 19.00H	LAT=	72.9	17 - 1976/249/	6.67H	LAT=	12.0
8 - 1976/248/ 16.00H	LAT=	71.4	18 - 1976/249/	5.65H	LAT=	31.9
9 - 1976/248/ 17.67H	LAT=	68.5	19 - 1976/249/	7.92H	LAT=	57.2
10 - 1976/248/ 20.50H	LAT=	61.8	20 - 1976/249/	14.00H	LAT=	67.9

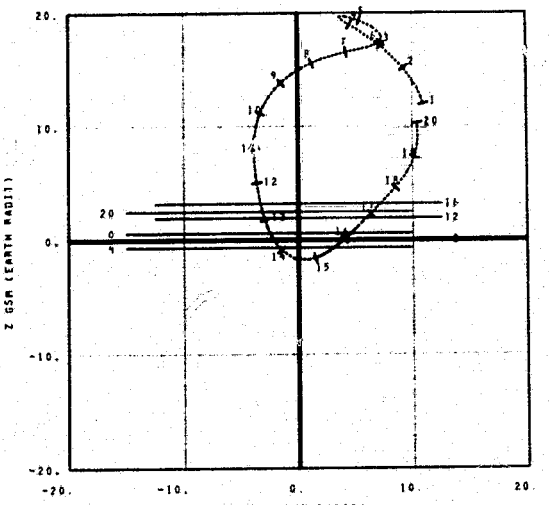
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/247/13.00H TO 1976/249/14.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/247/ 13.17H	R= 16.8R_E	11 - 1976/248/ 23.00H	R= 9.1R_E
2 - 1976/247/ 16.00H	R= 18.3R_E	12 - 1976/249/ 0.75H	R= 6.9R_E
3 - 1976/247/ 18.00H	R= 19.0R_E	13 - 1976/249/ 2.17H	R= 5.0R_E
4 - 1976/247/ 21.00H	R= 19.8R_E	14 - 1976/249/ 3.08H	R= 1.9R_E
5 - 1976/248/ 0.00H	R= 20.2R_E	15 - 1976/249/ 3.92H	R= 2.3R_E
6 - 1976/248/ 10.00H	R= 18.9R_E	16 - 1976/249/ 5.00H	R= 4.4R_E
7 - 1976/248/ 14.00H	R= 17.1R_E	17 - 1976/249/ 6.67H	R= 7.5R_E
8 - 1976/248/ 16.33H	R= 15.6R_E	18 - 1976/249/ 8.83H	R= 10.4R_E
9 - 1976/248/ 18.50H	R= 14.0R_E	19 - 1976/249/ 11.50H	R= 13.2R_E
10 - 1976/248/ 20.83H	R= 11.7R_E	20 - 1976/249/ 14.00H	R= 15.3R_E

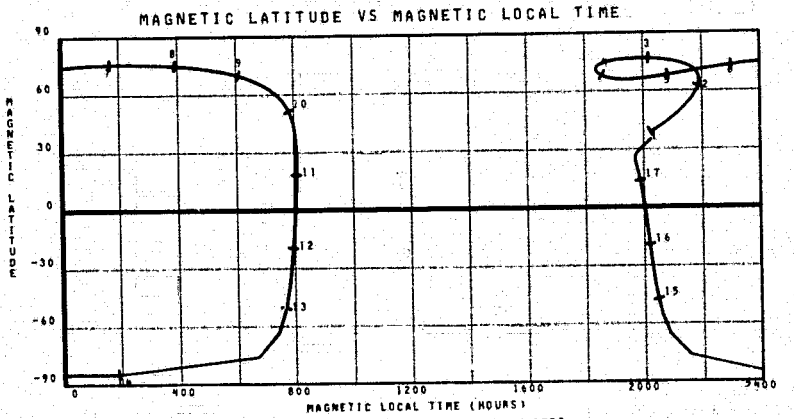
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/247/13.00H TO 1976/249/14.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

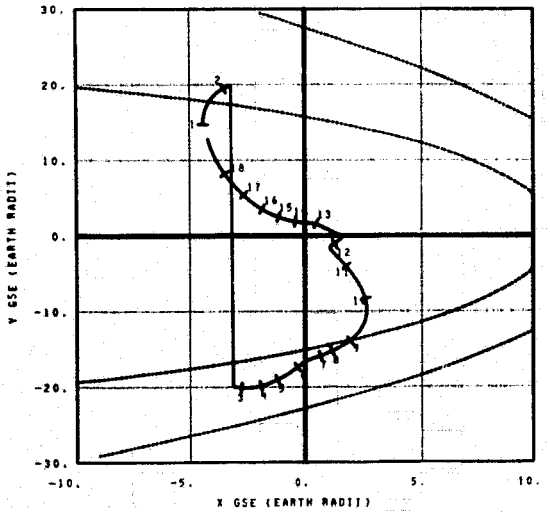
1 - 1976/247/ 13.17H	R= 16.8R_E	8 - 1976/248/ 20.00H	R= 12.4R_E	15 - 1976/249/ 3.83H	R= 2.1R_E
2 - 1976/247/ 20.50H	R= 19.7R_E	9 - 1976/248/ 21.83H	R= 10.6R_E	16 - 1976/249/ 4.25H	R= 3.0R_E
3 - 1976/248/ 1.50H	R= 20.3R_E	10 - 1976/249/ 0.75H	R= 6.9R_E	17 - 1976/249/ 5.83H	R= 6.1R_E
4 - 1976/248/ 7.50H	R= 19.6R_E	11 - 1976/249/ 2.42H	R= 3.3R_E		
5 - 1976/248/ 11.50H	R= 17.4R_E	12 - 1976/249/ 3.00H	R= 2.1R_E		
6 - 1976/248/ 16.33H	R= 15.6R_E	13 - 1976/249/ 3.25H	R= 1.7R_E		
7 - 1976/248/ 18.50H	R= 14.0R_E	14 - 1976/249/ 3.50H	R= 1.7R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/247 /13.00H TO1976/249 /14.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/249/ 14.17H	LAT=	67.7	11 - 1976/251/	5.00H	LAT=	22.2
2 - 1976/250/ 0.17H	LAT=	79.4	12 - 1976/251/	6.50H	LAT=	-69.9
3 - 1976/250/ 4.67H	LAT=	81.7	13 - 1976/251/	6.67H	LAT=	-78.4
4 - 1976/250/ 9.17H	LAT=	81.3	14 - 1976/251/	6.92H	LAT=	-85.4
5 - 1976/250/ 12.67H	LAT=	79.1	15 - 1976/251/	7.33H	LAT=	-9.8
6 - 1976/250/ 16.67H	LAT=	75.0	16 - 1976/251/	7.93H	LAT=	14.4
7 - 1976/250/ 19.17H	LAT=	71.5	17 - 1976/251/	9.00H	LAT=	33.6
8 - 1976/250/ 20.00H	LAT=	70.1	18 - 1976/251/	10.03H	LAT=	48.4
9 - 1976/250/ 21.67H	LAT=	66.9				
10 - 1976/251/ 2.50H	LAT=	50.6				

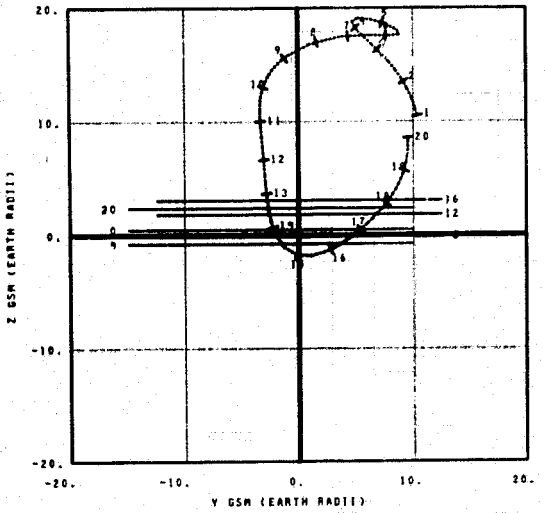
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/249/14.00H TO 1976/251/15.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/249/ 14.17H	R= 15.9R_E	11 - 1976/251/	1.00H	R= 10.7R_E
2 - 1976/249/ 16.50H	R= 16.9R_E	12 - 1976/251/	3.33H	R= 7.5R_E
3 - 1976/249/ 19.17H	R= 18.2R_E	13 - 1976/251/	4.83H	R= 4.9R_E
4 - 1976/249/ 22.17H	R= 19.3R_E	14 - 1976/251/	5.92H	R= 2.7R_E
5 - 1976/250/ 5.17H	R= 20.3R_E	15 - 1976/251/	6.75H	R= 1.7R_E
6 - 1976/250/ 12.17H	R= 19.2R_E	16 - 1976/251/	7.67H	R= 3.9R_E
7 - 1976/250/ 15.17H	R= 18.1R_E	17 - 1976/251/	9.00H	R= 6.1R_E
8 - 1976/250/ 17.17H	R= 17.1R_E	18 - 1976/251/	10.03H	R= 8.9R_E
9 - 1976/250/ 19.50H	R= 15.7R_E	19 - 1976/251/	13.00H	R= 11.5R_E
10 - 1976/250/ 22.33H	R= 13.4R_E	20 - 1976/251/	15.00H	R= 13.5R_E

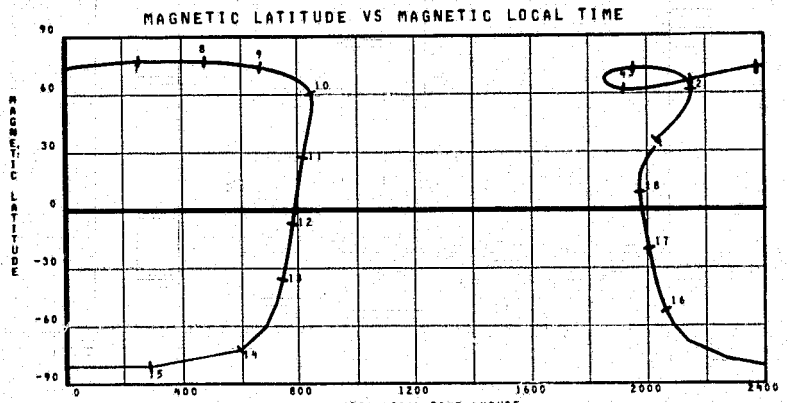
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/249/14.00H TO 1976/251/15.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

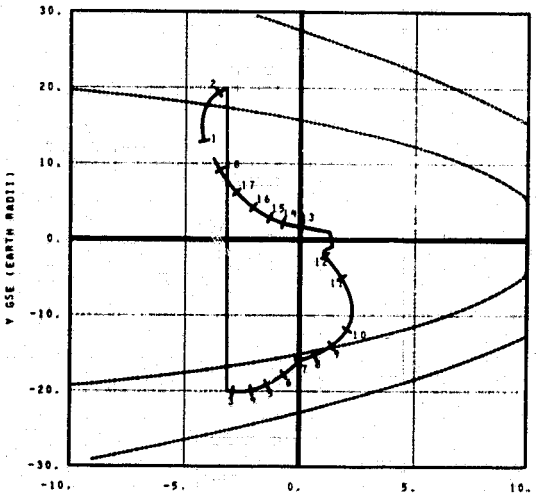
1 - 1976/249/ 14.17H	R= 15.9R_E	8 - 1976/250/ 22.00H	R= 13.7R_E	15 - 1976/251/ 6.75H	R= 1.7R_E
2 - 1976/249/ 21.17H	R= 15.0R_E	9 - 1976/250/ 23.67H	R= 12.1R_E	16 - 1976/251/ 7.00H	R= 2.2R_E
3 - 1976/250/ 2.17H	R= 20.1R_E	10 - 1976/251/ 3.17H	R= 7.0R_E	17 - 1976/251/ 7.67H	R= 3.9R_E
4 - 1976/250/ 9.67H	R= 19.0R_E	11 - 1976/251/ 5.50H	R= 3.4R_E	18 - 1976/251/ 9.50H	R= 7.0R_E
5 - 1976/250/ 15.17H	R= 18.1R_E	12 - 1976/251/ 6.17H	R= 2.1R_E		
6 - 1976/250/ 18.17H	R= 16.5R_E	13 - 1976/251/ 6.42H	R= 1.8R_E		
7 - 1976/250/ 20.50H	R= 14.9R_E	14 - 1976/251/ 6.67H	R= 1.7R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/249/14.00H TO1976/251/15.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/251/	15.17H	LAT=	63.3	11 - 1976/253/	7.83H	LAT=	30.9
2 - 1976/252/	3.00H	LAT=	79.1	12 - 1976/253/	9.25H	LAT=	-17.9
3 - 1976/252/	7.50H	LAT=	81.5	13 - 1976/253/	9.92H	LAT=	-72.9
4 - 1976/252/	12.00H	LAT=	81.9	14 - 1976/253/	10.33H	LAT=	-24.3
5 - 1976/252/	15.50H	LAT=	79.5	15 - 1976/253/	10.75H	LAT=	8.9
6 - 1976/252/	19.00H	LAT=	76.1	16 - 1976/253/	11.50H	LAT=	22.8
7 - 1976/252/	22.00H	LAT=	72.2	17 - 1976/253/	12.67H	LAT=	38.5
8 - 1976/252/	23.33H	LAT=	70.0	18 - 1976/253/	14.75H	LAT=	51.8
9 - 1976/253/	0.83H	LAT=	67.1				
10 - 1976/253/	3.00H	LAT=	61.7				

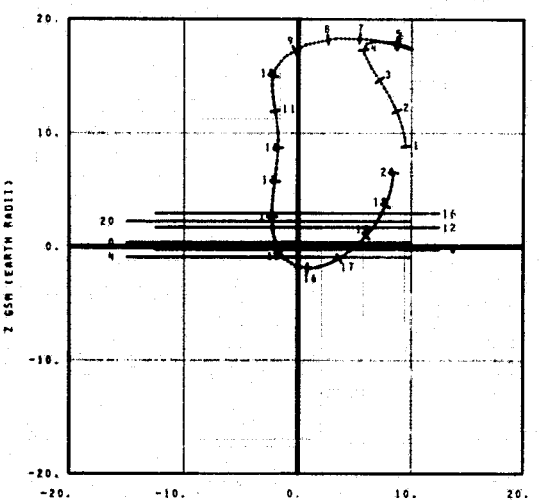
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/251/15.00H TO 1976/253/16.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/251/	15.17H	R=	13.7R_E	11 - 1976/253/	2.83H	R=	12.2R_E
2 - 1976/251/	17.33H	R=	15.4R_E	12 - 1976/253/	5.50H	R=	9.0R_E
3 - 1976/251/	19.67H	R=	16.9R_E	13 - 1976/253/	7.25H	R=	6.4R_E
4 - 1976/251/	23.50H	R=	18.7R_E	14 - 1976/253/	8.50H	R=	3.8R_E
5 - 1976/252/	5.50H	R=	20.1R_E	15 - 1976/253/	9.50H	R=	1.9R_E
6 - 1976/252/	12.50H	R=	19.9R_E	16 - 1976/253/	10.25H	R=	2.1R_E
7 - 1976/252/	19.50H	R=	19.2R_E	17 - 1976/253/	11.83H	R=	4.2R_E
8 - 1976/252/	17.50H	R=	18.5R_E	18 - 1976/253/	12.58H	R=	6.7R_E
9 - 1976/252/	20.00H	R=	17.3R_E	19 - 1976/253/	14.25H	R=	9.8R_E
10 - 1976/252/	23.33H	R=	15.2R_E	20 - 1976/253/	16.00H	R=	11.3R_E

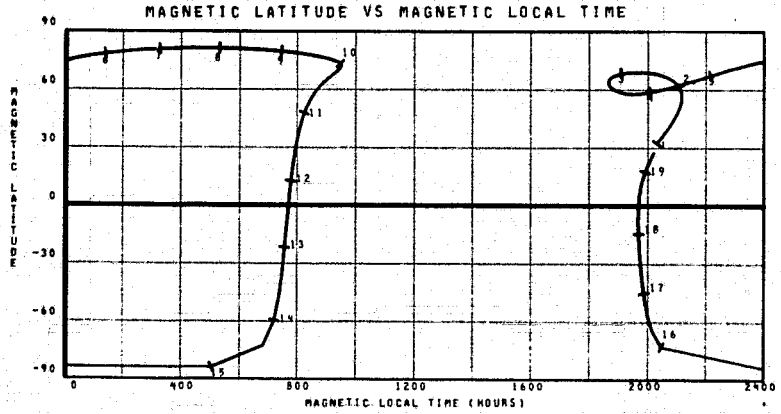
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/251/15.00H TO 1976/253/16.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

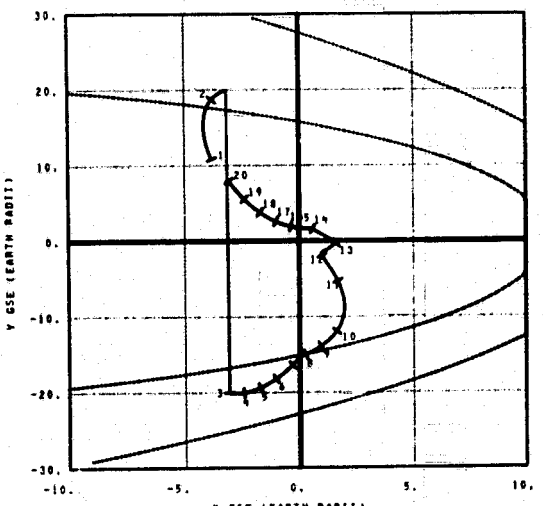
1 - 1976/251/	15.17H	R=	13.7R_E	8 - 1976/252/	23.50H	R=	19.1R_E
2 - 1976/251/	22.00H	R=	18.1R_E	9 - 1976/253/	1.00H	R=	13.9R_E
3 - 1976/252/	3.00H	R=	19.7R_E	10 - 1976/253/	4.50H	R=	10.3R_E
4 - 1976/252/	12.50H	R=	19.9R_E	11 - 1976/253/	8.42H	R=	4.2R_E
5 - 1976/252/	17.00H	R=	18.7R_E	12 - 1976/253/	9.25H	R=	2.4R_E
6 - 1976/252/	21.00H	R=	16.7R_E	13 - 1976/253/	9.58H	R=	1.8R_E
7 - 1976/252/	22.33H	R=	15.9R_E	14 - 1976/253/	9.83H	R=	1.7R_E
				15 - 1976/253/	10.00H	R=	1.8R_E
				16 - 1976/253/	10.17H	R=	2.0R_E
				17 - 1976/253/	10.50H	R=	2.6R_E
				18 - 1976/253/	11.33H	R=	4.4R_E
				19 - 1976/253/	14.33H	R=	9.3R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/251 /15.00H TO1976/253 /16.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/253/	16.17H	LAT=	57.3	11 - 1976/255/	10.92H	LAT=	32.9
2 - 1976/254/	3.83H	LAT=	77.0	12 - 1976/255/	12.58H	LAT=	-28.7
3 - 1976/254/	9.83H	LAT=	81.2	13 - 1976/255/	13.08H	LAT=	-80.9
4 - 1976/254/	13.83H	LAT=	81.8	14 - 1976/255/	13.08H	LAT=	-70.1
5 - 1976/254/	17.83H	LAT=	80.1	15 - 1976/255/	13.17H	LAT=	-45.9
6 - 1976/254/	21.33H	LAT=	77.1	16 - 1976/255/	13.35H	LAT=	-93.1
7 - 1976/255/	0.83H	LAT=	72.8	17 - 1976/255/	13.78H	LAT=	-7.7
8 - 1976/255/	2.83H	LAT=	69.5	18 - 1976/255/	14.43H	LAT=	16.6
9 - 1976/255/	4.17H	LAT=	66.9	19 - 1976/255/	15.42H	LAT=	33.6
10 - 1976/255/	6.17H	LAT=	61.8	20 - 1976/255/	17.08H	LAT=	46.8

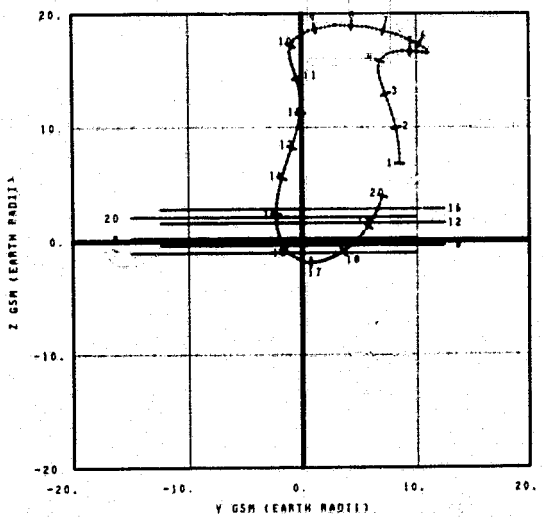
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/253/16.00H TO 1976/255/17.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/253/	16.17H	R=	11.5RE	11 - 1976/255/	3.67H	R=	19.3RE
2 - 1976/253/	18.17H	R=	13.5RE	12 - 1976/255/	6.83H	R=	21.3RE
3 - 1976/253/	20.50H	R=	15.9RE	13 - 1976/255/	9.17H	R=	0.4RE
4 - 1976/254/	0.33H	R=	17.7RE	14 - 1976/255/	10.67H	R=	6.0RE
5 - 1976/254/	5.33H	R=	19.5RE	15 - 1976/255/	11.92H	R=	3.5RE
6 - 1976/254/	12.33H	R=	20.3RE	16 - 1976/255/	12.75H	R=	1.9RE
7 - 1976/254/	15.33H	R=	20.0RE	17 - 1976/255/	13.42H	R=	2.1RE
8 - 1976/254/	17.33H	R=	19.6RE	18 - 1976/255/	14.33H	R=	4.0RE
9 - 1976/254/	19.83H	R=	18.8RE	19 - 1976/255/	15.58H	R=	6.9RE
10 - 1976/254/	23.33H	R=	17.2RE	20 - 1976/255/	17.00H	R=	8.6RE

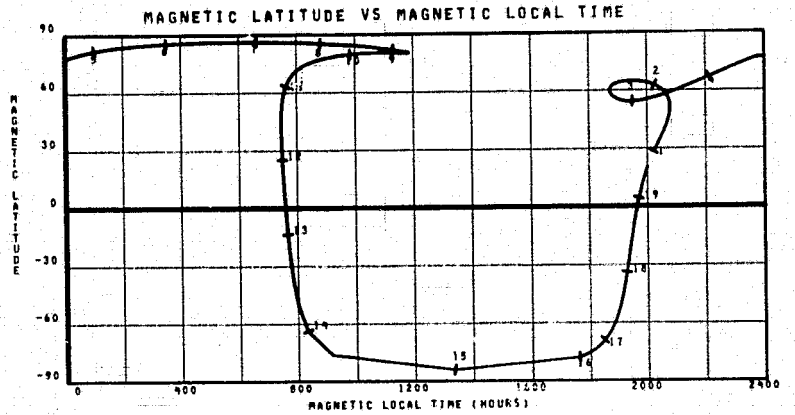
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/253/16.00H TO 1976/255/17.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

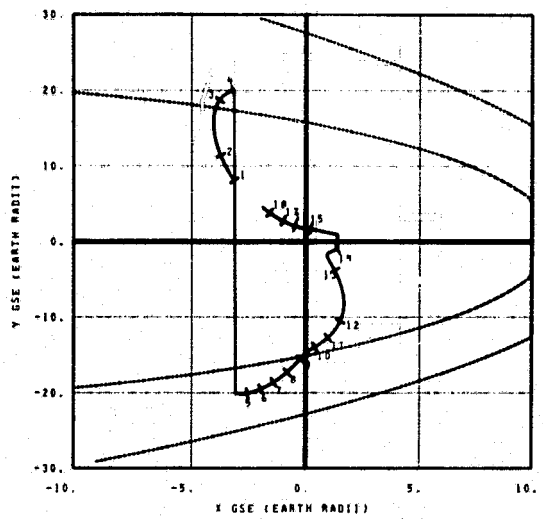
1 - 1976/253/	16.17H	R=	11.5RE	8 - 1976/255/	1.67H	R=	19.8RE	15 - 1976/255/	13.25H	R=	1.8RE
2 - 1976/253/	23.00H	R=	17.9RE	9 - 1976/255/	4.00H	R=	16.1RE	16 - 1976/255/	13.33H	R=	1.9RE
3 - 1976/254/	16.83H	R=	20.3RE	10 - 1976/255/	9.00H	R=	0.6RE	17 - 1976/255/	13.42H	R=	2.1RE
4 - 1976/254/	17.83H	R=	19.9RE	11 - 1976/255/	11.17H	R=	5.1RE	18 - 1976/255/	13.92H	R=	3.1RE
5 - 1976/254/	22.33H	R=	17.8RE	12 - 1976/255/	12.33H	R=	2.6RE	19 - 1976/255/	15.58H	R=	6.2RE
6 - 1976/254/	23.83H	R=	17.0RE	13 - 1976/255/	12.75H	R=	1.9RE				
7 - 1976/255/	0.83H	R=	16.4RE	14 - 1976/255/	13.08H	R=	1.7RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/253 /16.00H TO1976/255 /17.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/255/ 17.00 H	LAT= 97.3	11 - 1976/257/ 8.67 H	LAT= 63.9
2 - 1976/255/ 19.03 H	LAT= 98.7	12 - 1976/257/ 10.67 H	LAT= 97.6
3 - 1976/256/ 7.00 H	LAT= 76.9	13 - 1976/257/ 14.92 H	LAT= 17.2
4 - 1976/256/ 12.50 H	LAT= 81.0	14 - 1976/257/ 16.17 H	LAT= -75.9
5 - 1976/256/ 17.00 H	LAT= 81.0	15 - 1976/257/ 16.33 H	LAT= -72.7
6 - 1976/256/ 20.50 H	LAT= 80.5	16 - 1976/257/ 16.67 H	LAT= -31.7
7 - 1976/256/ 23.50 H	LAT= 78.2	17 - 1976/257/ 17.03 H	LAT= -9.5
8 - 1976/257/ 2.50 H	LAT= 74.9	18 - 1976/257/ 17.62 H	LAT= 16.0
9 - 1976/257/ 5.33 H	LAT= 70.8		
10 - 1976/257/ 7.33 H	LAT= 67.0		

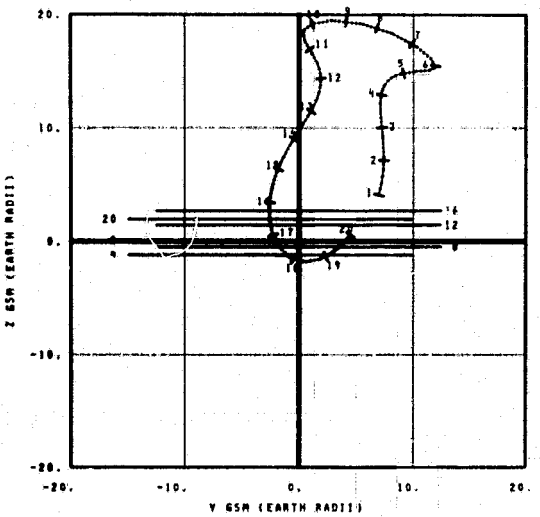
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/255/17.00H TO 1976/257/18.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/255/ 17.00 H	R= 8.7 R_E	11 - 1976/257/ 3.00 H	R= 17.6 R_E
2 - 1976/255/ 19.03 H	R= 10.9 R_E	12 - 1976/257/ 6.67 H	R= 14.5 R_E
3 - 1976/256/ 7.00 H	R= 13.0 R_E	13 - 1976/257/ 9.03 H	R= 11.5 R_E
4 - 1976/256/ 12.50 H	R= 15.3 R_E	14 - 1976/257/ 11.03 H	R= 9.1 R_E
5 - 1976/256/ 17.00 H	R= 17.9 R_E	15 - 1976/257/ 13.42 H	R= 6.6 R_E
6 - 1976/256/ 20.50 H	R= 19.9 R_E	16 - 1976/257/ 14.67 H	R= 4.9 R_E
7 - 1976/256/ 23.50 H	R= 20.3 R_E	17 - 1976/257/ 15.58 H	R= 3.6 R_E
8 - 1976/256/ 16.50 H	R= 20.2 R_E	18 - 1976/257/ 16.25 H	R= 1.7 R_E
9 - 1976/256/ 10.50 H	R= 20.0 R_E	19 - 1976/257/ 17.00 H	R= 2.0 R_E
10 - 1976/256/ 21.50 H	R= 19.3 R_E	20 - 1976/257/ 18.00 H	R= 4.9 R_E

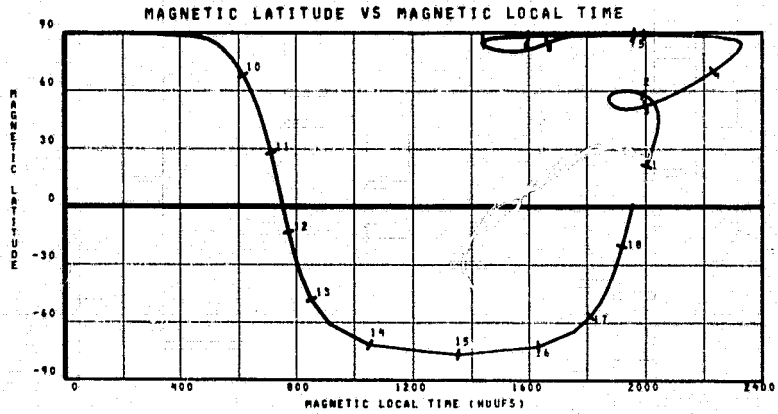
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/255/17.00H TO 1976/257/18.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

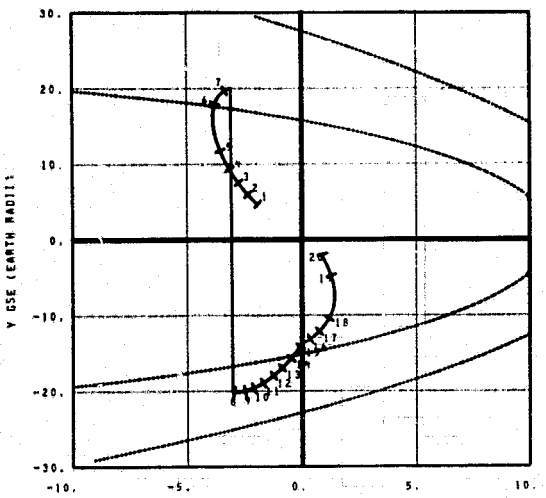
1 - 1976/255/ 17.00 H	R= 8.7 R_E	9 - 1976/257/ 5.03 H	R= 11.9 R_E	16 - 1976/257/ 16.58 H	R= 1.8 R_E
2 - 1976/255/ 19.03 H	R= 10.9 R_E	10 - 1976/257/ 7.17 H	R= 10.8 R_E	17 - 1976/257/ 16.67 H	R= 2.1 R_E
3 - 1976/256/ 13.00 H	R= 20.2 R_E	11 - 1976/257/ 13.92 H	R= 5.9 R_E	18 - 1976/257/ 17.29 H	R= 3.4 R_E
4 - 1976/256/ 19.00 H	R= 19.0 R_E	12 - 1976/257/ 15.92 H	R= 2.9 R_E		
5 - 1976/257/ 1.00 H	R= 15.0 R_E	13 - 1976/257/ 15.92 H	R= 1.9 R_E		
6 - 1976/257/ 3.00 H	R= 17.6 R_E	14 - 1976/257/ 16.17 H	R= 1.7 R_E		
7 - 1976/257/ 3.00 H	R= 17.3 R_E	15 - 1976/257/ 16.33 H	R= 1.7 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/255 /17.00H TO1976/257 /18.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/257/ 18.00H	LAT= 25.0	11 - 1976/259/ 1.83H	LAT= 79.0		
2 - 1976/257/ 18.83H	LAT= 33.9	12 - 1976/259/ 4.33H	LAT= 76.6		
3 - 1976/257/ 19.83H	LAT= 44.4	13 - 1976/259/ 6.33H	LAT= 74.2		
4 - 1976/257/ 21.17H	LAT= 51.8	14 - 1976/259/ 8.33H	LAT= 71.2		
5 - 1976/257/ 23.33H	LAT= 59.5	15 - 1976/259/ 10.33H	LAT= 67.5		
6 - 1976/258/ 0.33H	LAT= 74.9	16 - 1976/259/ 11.50H	LAT= 64.9		
7 - 1976/258/ 13.83H	LAT= 79.8	17 - 1976/259/ 12.50H	LAT= 62.2		
8 - 1976/258/ 17.33H	LAT= 81.6	18 - 1976/259/ 14.88H	LAT= 57.1		
9 - 1976/258/ 20.83H	LAT= 81.7	19 - 1976/259/ 17.67H	LAT= 37.6		
10 - 1976/258/ 23.33H	LAT= 80.7	20 - 1976/259/ 19.00H	LAT= -28.6		

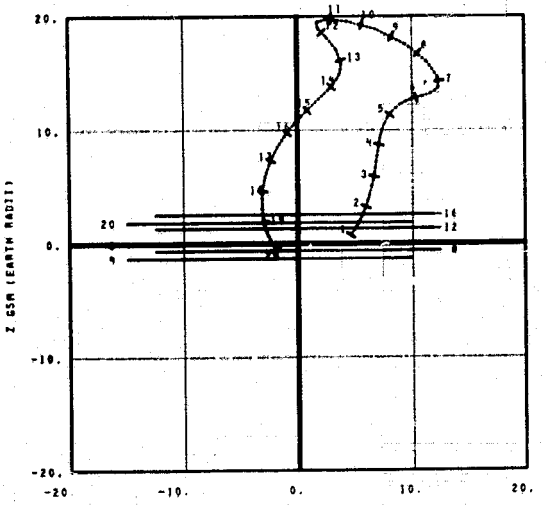
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/257/18.00H TO 1976/259/19.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/257/ 18.00H	R= 9.1R_E	11 - 1976/258/ 20.83H	R= 20.1R_E
2 - 1976/257/ 19.33H	R= 7.2R_E	12 - 1976/259/ 2.33H	R= 18.0R_E
3 - 1976/257/ 20.83H	R= 9.4R_E	13 - 1976/259/ 6.83H	R= 16.6R_E
4 - 1976/257/ 22.83H	R= 11.8R_E	14 - 1976/259/ 10.33H	R= 14.1R_E
5 - 1976/258/ 1.67H	R= 14.4R_E	15 - 1976/259/ 12.83H	R= 11.8R_E
6 - 1976/258/ 5.33H	R= 16.9R_E	16 - 1976/259/ 14.50H	R= 9.8R_E
7 - 1976/258/ 10.83H	R= 19.3R_E	17 - 1976/259/ 16.00H	R= 7.8R_E
8 - 1976/258/ 14.33H	R= 20.0R_E	18 - 1976/259/ 17.25H	R= 5.7R_E
9 - 1976/258/ 16.33H	R= 20.3R_E	19 - 1976/259/ 18.25H	R= 3.7R_E
10 - 1976/258/ 18.33H	R= 20.3R_E	20 - 1976/259/ 19.00H	R= 2.1R_E

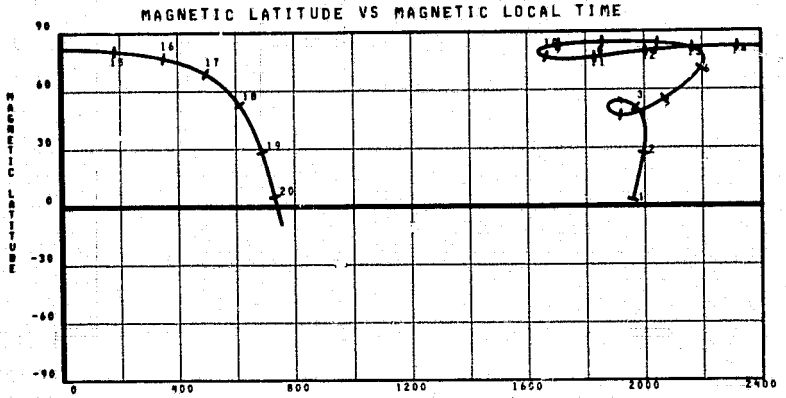
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/257/18.00H TO 1976/259/19.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

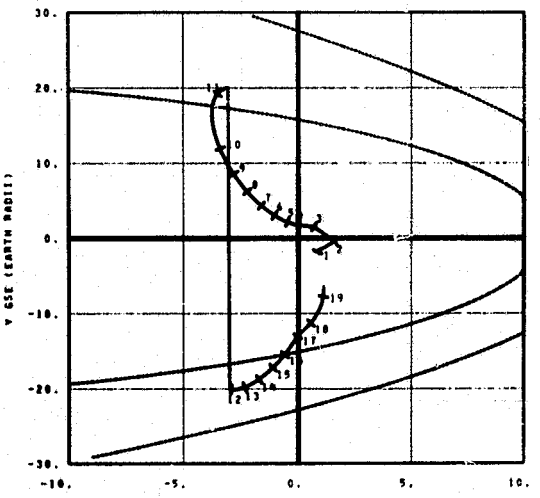
1 - 1976/257/ 18.00H	R= 9.1R_E	8 - 1976/259/ 1.33H	R= 19.1R_E	15 - 1976/259/ 14.33H	R= 10.0R_E
2 - 1976/257/ 19.92H	R= 8.1R_E	9 - 1976/259/ 2.33H	R= 18.8R_E	16 - 1976/259/ 15.17H	R= 9.0R_E
3 - 1976/257/ 21.00H	R= 12.9R_E	10 - 1976/259/ 5.83H	R= 17.2R_E	17 - 1976/259/ 16.25H	R= 7.9R_E
4 - 1976/258/ 0.83H	R= 19.0R_E	11 - 1976/259/ 9.67H	R= 14.2R_E	18 - 1976/259/ 17.58H	R= 5.2R_E
5 - 1976/258/ 10.83H	R= 20.1R_E	12 - 1976/259/ 11.67H	R= 12.9R_E	19 - 1976/259/ 18.42H	R= 3.4R_E
6 - 1976/258/ 20.83H	R= 20.2R_E	13 - 1976/259/ 12.67H	R= 11.9R_E	20 - 1976/259/ 19.08H	R= 2.9R_E
7 - 1976/259/ 0.33H	R= 19.9R_E	14 - 1976/259/ 13.33H	R= 11.2R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/257 /18.00H TO1976/259 /19.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/259/ 15.00 H	LAT= -37.2	11 - 1976/260/ 17.00 H	LAT= 78.3
2 - 1976/259/ 19.92 H	LAT= -80.5	12 - 1976/260/ 21.00 H	LAT= 81.7
3 - 1976/259/ 19.50 H	LAT= -78.2	13 - 1976/261/ 1.50 H	LAT= 81.3
4 - 1976/259/ 19.58 H	LAT= -67.0	14 - 1976/261/ 9.50 H	LAT= 78.7
5 - 1976/259/ 19.92 H	LAT= -27.9	15 - 1976/261/ 9.00 H	LAT= 74.9
6 - 1976/259/ 20.50 H	LAT= 1.9	16 - 1976/261/ 11.83 H	LAT= 70.0
7 - 1976/259/ 21.00 H	LAT= 21.0	17 - 1976/261/ 14.83 H	LAT= 64.7
8 - 1976/259/ 22.17 H	LAT= 37.1	18 - 1976/261/ 16.50 H	LAT= 59.0
9 - 1976/259/ 23.75 H	LAT= 48.6	19 - 1976/261/ 19.17 H	LAT= 47.0
10 - 1976/260/ 2.67 H	LAT= 59.0		

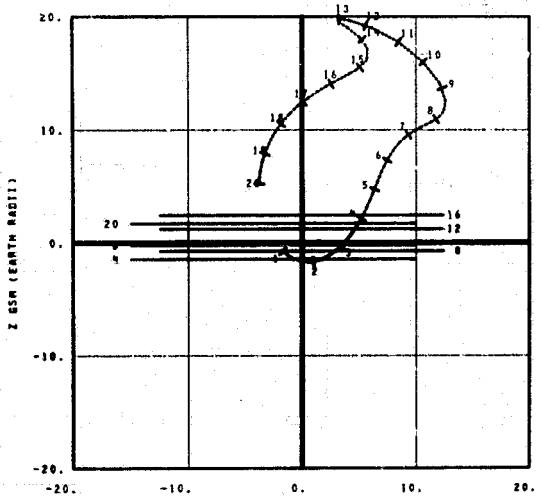
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/259/19.00H TO 1976/261/20.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/259/ 19.00 H	R= 2.0 R_E	11 - 1976/260/ 17.00 H	R= 20.0 R_E
2 - 1976/259/ 19.75 H	R= 1.9 R_E	12 - 1976/260/ 19.50 H	R= 20.2 R_E
3 - 1976/259/ 20.57 H	R= 3.6 R_E	13 - 1976/260/ 23.00 H	R= 20.2 R_E
4 - 1976/259/ 21.75 H	R= 5.9 R_E	14 - 1976/261/ 9.50 H	R= 18.6 R_E
5 - 1976/259/ 23.25 H	R= 8.3 R_E	15 - 1976/261/ 10.50 H	R= 16.3 R_E
6 - 1976/260/ 1.25 H	R= 10.9 R_E	16 - 1976/261/ 13.33 H	R= 14.3 R_E
7 - 1976/260/ 4.17 H	R= 13.0 R_E	17 - 1976/261/ 15.33 H	R= 12.5 R_E
8 - 1976/260/ 7.83 H	R= 16.5 R_E	18 - 1976/261/ 17.00 H	R= 10.7 R_E
9 - 1976/260/ 12.50 H	R= 18.8 R_E	19 - 1976/261/ 18.67 H	R= 8.6 R_E
10 - 1976/260/ 15.00 H	R= 19.5 R_E	20 - 1976/261/ 20.00 H	R= 6.5 R_E

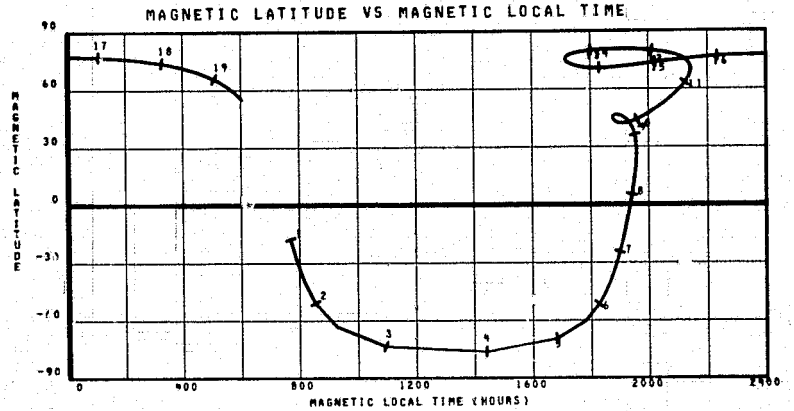
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/259/19.00H TO 1976/261/20.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

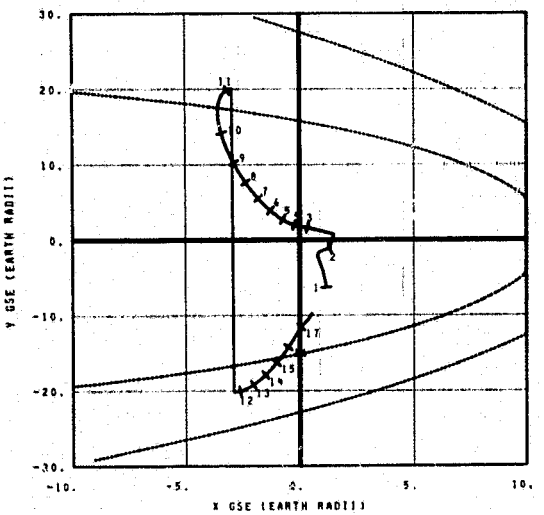
1 - 1976/259/ 19.00 H	R= 2.0 R_E	8 - 1976/259/ 20.00 H	R= 6.5 R_E	15 - 1976/261/ 12.33 H	R= 15.1 R_E
2 - 1976/259/ 19.33 H	R= 1.7 R_E	9 - 1976/259/ 23.50 H	R= 8.7 R_E	16 - 1976/261/ 13.33 H	R= 13.9 R_E
3 - 1976/259/ 19.50 H	R= 1.7 R_E	10 - 1976/260/ 12.50 H	R= 18.8 R_E	17 - 1976/261/ 14.00 H	R= 11.8 R_E
4 - 1976/259/ 19.58 H	R= 1.7 R_E	11 - 1976/260/ 19.00 H	R= 20.2 R_E	18 - 1976/261/ 17.33 H	R= 10.3 R_E
5 - 1976/259/ 19.67 H	R= 1.8 R_E	12 - 1976/260/ 24.00 H	R= 20.1 R_E	19 - 1976/261/ 18.83 H	R= 8.3 R_E
6 - 1976/259/ 19.83 H	R= 2.1 R_E	13 - 1976/261/ 2.00 H	R= 19.0 R_E		
7 - 1976/259/ 20.10 H	R= 2.8 R_E	14 - 1976/261/ 9.00 H	R= 17.2 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/259 /19.00H TO1976/261 /20.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/261/ 20.00H	LAT= 38.9	11 - 1976/262/ 21.33H	LAT= 80.9
2 - 1976/261/ 22.50H	LAT= -75.6	12 - 1976/263/ 2.83H	LAT= 81.8
3 - 1976/261/ 22.75H	LAT= -73.0	13 - 1976/263/ 7.33H	LAT= 79.8
4 - 1976/261/ 23.00H	LAT= -40.5	14 - 1976/263/ 10.83H	LAT= 76.6
5 - 1976/261/ 23.42H	LAT= -7.3	15 - 1976/263/ 13.83H	LAT= 72.8
6 - 1976/262/ 0.83H	LAT= 15.9	16 - 1976/263/ 16.67H	LAT= 67.9
7 - 1976/262/ 0.92H	LAT= 31.9	17 - 1976/263/ 19.50H	LAT= 60.6
8 - 1976/262/ 2.25H	LAT= 44.3		
9 - 1976/262/ 4.25H	LAT= 54.4		
10 - 1976/262/ 8.33H	LAT= 69.4		

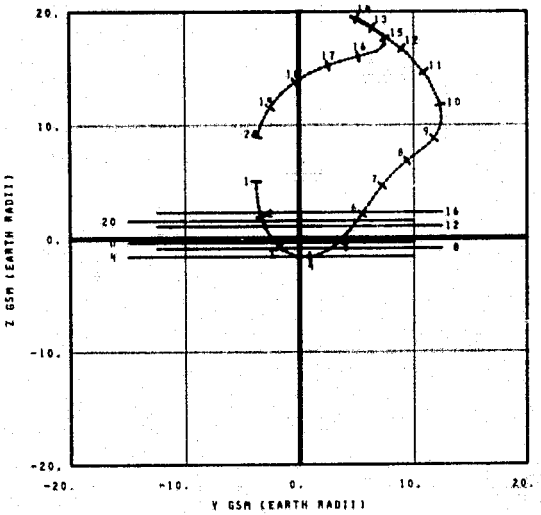
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/261/20.00H TO 1976/263/21.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/261/ 20.00H	R= 6.4RE	11 - 1976/262/ 19.33H	R= 18.6RE
2 - 1976/261/ 21.33H	R= 4.0RE	12 - 1976/262/ 17.33H	R= 19.3RE
3 - 1976/261/ 22.25H	R= 2.1RE	13 - 1976/262/ 19.83H	R= 19.9RE
4 - 1976/261/ 22.92H	R= 1.9RE	14 - 1976/263/ 2.33H	R= 20.2RE
5 - 1976/261/ 23.00H	R= 3.7RE	15 - 1976/263/ 7.33H	R= 19.3RE
6 - 1976/262/ 1.00H	R= 6.1RE	16 - 1976/263/ 12.83H	R= 16.9RE
7 - 1976/262/ 2.92H	R= 9.0RE	17 - 1976/263/ 15.00H	R= 15.5RE
8 - 1976/262/ 5.50H	R= 12.0RE	18 - 1976/263/ 17.17H	R= 13.8RE
9 - 1976/262/ 9.00H	R= 15.1RE	19 - 1976/263/ 19.17H	R= 11.9RE
10 - 1976/262/ 12.67H	R= 17.4RE	20 - 1976/263/ 21.00H	R= 9.7RE

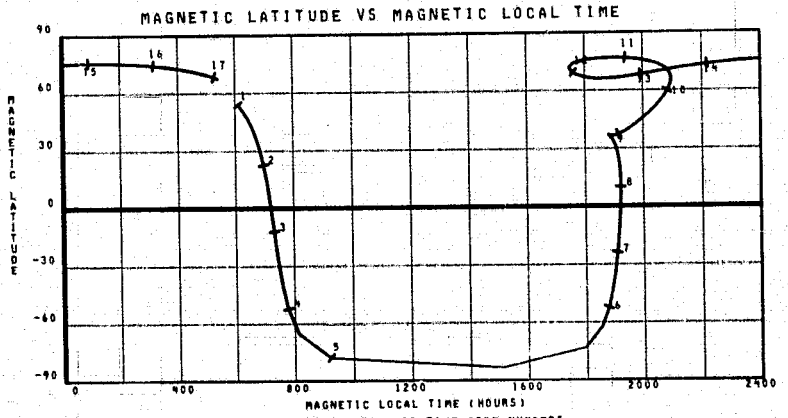
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/261/20.00H TO 1976/263/21.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

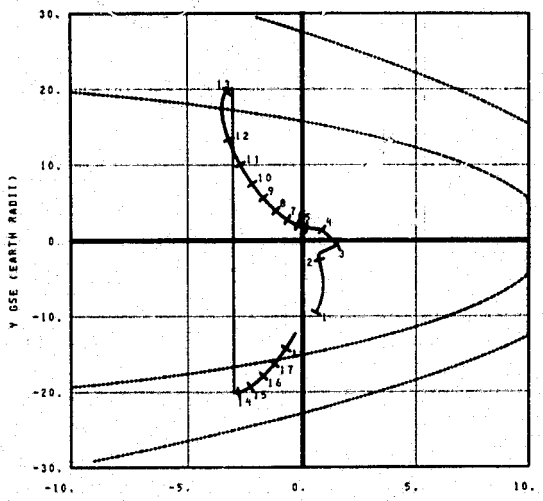
1 - 1976/261/ 20.00H	R= 6.4RE	8 - 1976/262/ 6.27H	R= 9.4RE	15 - 1976/263/ 17.50H	R= 13.9RE
2 - 1976/261/ 21.50H	R= 3.9RE	9 - 1976/262/ 10.50H	R= 14.8RE	16 - 1976/263/ 19.00H	R= 12.0RE
3 - 1976/261/ 22.17H	R= 2.2RE	10 - 1976/262/ 14.83H	R= 19.7RE	17 - 1976/263/ 20.83H	R= 10.0RE
4 - 1976/261/ 22.92H	R= 1.7RE	11 - 1976/263/ 0.33H	R= 20.3RE		
5 - 1976/261/ 23.67H	R= 1.7RE	12 - 1976/263/ 5.83H	R= 19.7RE		
6 - 1976/261/ 23.99H	R= 2.8RE	13 - 1976/263/ 12.33H	R= 17.2RE		
7 - 1976/261/ 23.33H	R= 5.0RE	14 - 1976/263/ 15.33H	R= 15.2RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/261 /20.00H TO1976/263 /21.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/263/ 21.17H	LAT= 59.1	11 - 1976/264/ 7.25H	LAT= 53.6		
2 - 1976/264/ 1.17H	LAT= -8.3	12 - 1976/264/ 10.50H	LAT= 63.2		
3 - 1976/264/ 1.83H	LAT= -80.1	13 - 1976/264/ 23.50H	LAT= 79.8		
4 - 1976/264/ 1.92H	LAT= -78.7	14 - 1976/265/ 5.50H	LAT= 81.8		
5 - 1976/264/ 2.08H	LAT= -67.5	15 - 1976/265/ 10.00H	LAT= 80.2		
6 - 1976/264/ 2.25H	LAT= -36.2	16 - 1976/265/ 14.00H	LAT= 74.7		
7 - 1976/264/ 2.63H	LAT= -6.9	17 - 1976/265/ 17.00H	LAT= 72.9		
8 - 1976/264/ 3.83H	LAT= 15.7	18 - 1976/265/ 19.83H	LAT= 68.1		
9 - 1976/264/ 4.17H	LAT= 32.5				
10 - 1976/264/ 5.33H	LAT= 43.4				

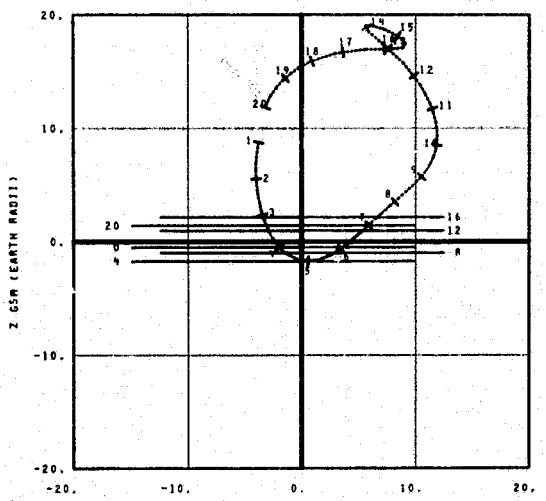
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/263/21.00H TO 1976/265/22.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/263/ 21.17H	R= 9.5R_E	11 - 1976/264/ 14.67H	R= 16.0R_E
2 - 1976/263/ 23.00H	R= 6.9R_E	12 - 1976/264/ 17.00H	R= 18.0R_E
3 - 1976/264/ 0.42H	R= 4.3R_E	13 - 1976/264/ 19.50H	R= 19.0R_E
4 - 1976/264/ 1.42H	R= 2.1R_E	14 - 1976/264/ 23.00H	R= 19.9R_E
5 - 1976/264/ 2.00H	R= 1.8R_E	15 - 1976/265/ 6.00H	R= 20.2R_E
6 - 1976/264/ 3.00H	R= 3.6R_E	16 - 1976/265/ 12.50H	R= 18.6R_E
7 - 1976/264/ 4.42H	R= 6.9R_E	17 - 1976/265/ 15.50H	R= 17.2R_E
8 - 1976/264/ 6.33H	R= 9.2R_E	18 - 1976/265/ 17.50H	R= 16.0R_E
9 - 1976/264/ 9.00H	R= 12.3R_E	19 - 1976/265/ 19.50H	R= 14.5R_E
10 - 1976/264/ 12.00H	R= 15.0R_E	20 - 1976/265/ 22.00H	R= 12.3R_E

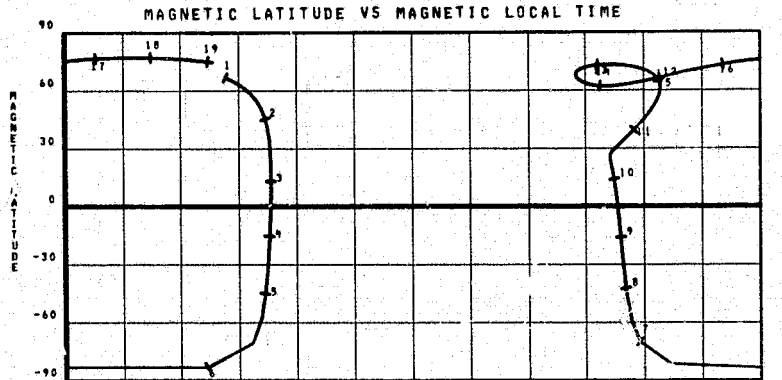
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/263/21.00H TO 1976/265/22.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

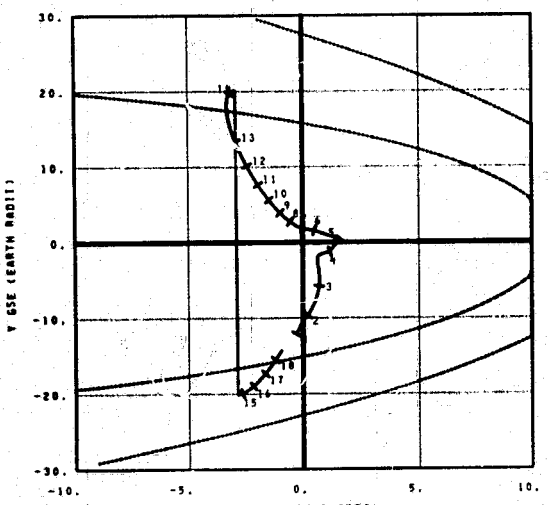
1 - 1976/263/ 21.17H	R= 9.5R_E	8 - 1976/264/ 3.33H	R= 2.2R_E
2 - 1976/263/ 23.75H	R= 6.9R_E	9 - 1976/264/ 4.17H	R= 3.1R_E
3 - 1976/264/ 1.08H	R= 4.3R_E	10 - 1976/264/ 5.33H	R= 5.9R_E
4 - 1976/264/ 1.92H	R= 2.1R_E	11 - 1976/264/ 14.33H	R= 16.6R_E
5 - 1976/264/ 2.08H	R= 1.8R_E	12 - 1976/264/ 21.00H	R= 19.9R_E
6 - 1976/264/ 2.42H	R= 1.7R_E	13 - 1976/265/ 1.50H	R= 20.2R_E
7 - 1976/264/ 2.58H	R= 1.8R_E	14 - 1976/265/ 9 [illegible]H	R= 19.7R_E
		15 - 1976/265/ 14.00H	R= 17.9R_E
		16 - 1976/265/ 17.00H	R= 16.3R_E
		17 - 1976/265/ 19.00H	R= 14.9R_E
		18 - 1976/265/ 20.33H	R= 13.8R_E
		19 - 1976/265/ 21.83H	R= 12.4R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/263/21.00H TO1976/265/22.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/265/ 22.17H	LAT= 62.4	11 - 1976/266/ 8.50H	LAT= 43.7		
2 - 1976/266/ 0.33H	LAT= 54.5	12 - 1976/266/ 10.50H	LAT= 53.8		
3 - 1976/266/ 2.83H	LAT= 35.3	13 - 1976/266/ 13.67H	LAT= 63.1		
4 - 1976/266/ 5.00H	LAT= -74.5	14 - 1976/267/ 2.33H	LAT= 79.5		
5 - 1976/266/ 5.05H	LAT= -81.8	15 - 1976/267/ 9.83H	LAT= 81.7		
6 - 1976/266/ 5.17H	LAT= -73.6	16 - 1976/267/ 14.33H	LAT= 79.5		
7 - 1976/266/ 5.33H	LAT= -50.9	17 - 1976/267/ 18.33H	LAT= 78.5		
8 - 1976/266/ 5.83H	LAT= -7.5	18 - 1976/267/ 21.33H	LAT= 71.2		
9 - 1976/266/ 6.92H	LAT= 15.0				
10 - 1976/266/ 7.33H	LAT= 31.9				

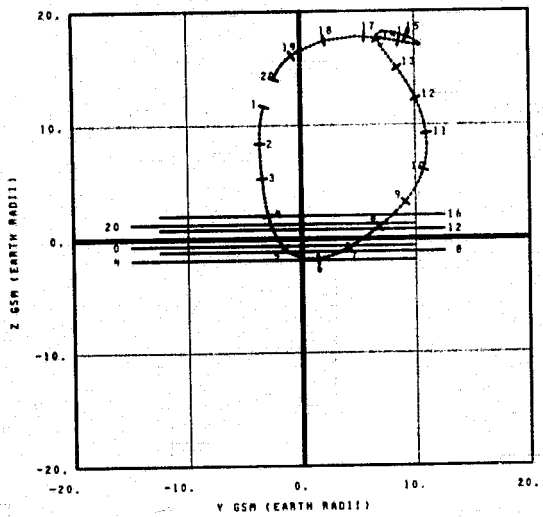
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/265/22.00H TO 1976/267/23.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/265/ 22.17H	R= 12.1RE	11 - 1976/266/ 19.83H	R= 19.7RE		
2 - 1976/266/ 0.67H	R= 9.2RE	12 - 1976/266/ 17.00H	R= 16.2RE		
3 - 1976/266/ 2.50H	R= 6.9RE	13 - 1976/266/ 19.33H	R= 17.6RE		
4 - 1976/266/ 3.92H	R= 3.7RE	14 - 1976/266/ 22.83H	R= 19.8RE		
5 - 1976/266/ 4.83H	R= 1.0RE	15 - 1976/267/ 5.33H	R= 20.3RE		
6 - 1976/266/ 5.50H	R= 2.3RE	16 - 1976/267/ 12.83H	R= 19.5RE		
7 - 1976/266/ 6.55H	R= 4.3RE	17 - 1976/267/ 15.33H	R= 18.7RE		
8 - 1976/266/ 8.00H	R= 7.1RE	18 - 1976/267/ 17.83H	R= 17.6RE		
9 - 1976/266/ 10.00H	R= 9.9RE	19 - 1976/267/ 20.33H	R= 16.2RE		
10 - 1976/266/ 12.50H	R= 12.6RE	20 - 1976/267/ 23.00H	R= 14.3RE		

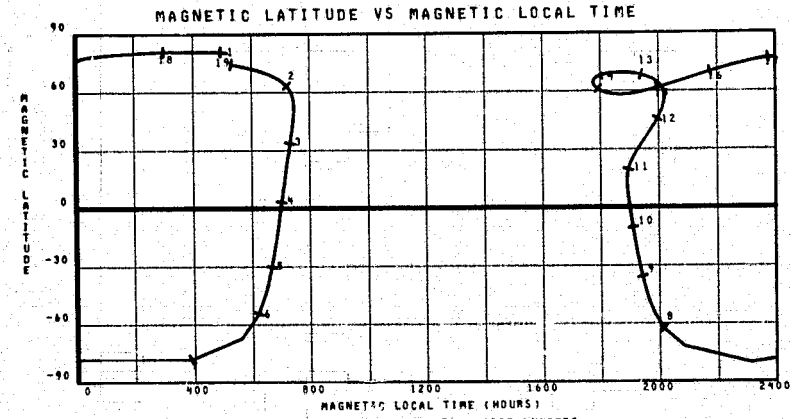
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/265/22.00H TO 1976/267/23.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

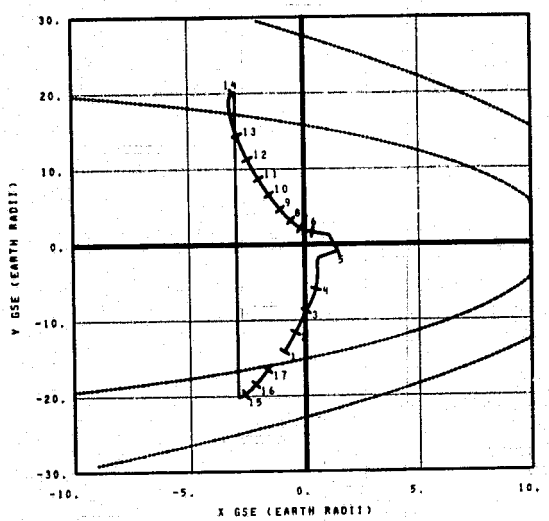
1 - 1976/265/ 22.17H	R= 12.1RE	8 - 1976/266/ 5.92H	R= 2.0RE	15 - 1976/267/ 13.33H	R= 19.4RE
2 - 1976/266/ 1.17H	R= 8.5RE	9 - 1976/266/ 5.75H	R= 2.6RE	16 - 1976/267/ 16.83H	R= 18.1RE
3 - 1976/266/ 3.83H	R= 3.8RE	10 - 1976/266/ 6.42H	R= 4.1RE	17 - 1976/267/ 19.33H	R= 16.0RE
4 - 1976/266/ 4.58H	R= 2.4RE	11 - 1976/266/ 10.17H	R= 10.1RE	18 - 1976/267/ 21.67H	R= 13.3RE
5 - 1976/266/ 4.83H	R= 1.0RE	12 - 1976/266/ 17.17H	R= 16.3RE	19 - 1976/267/ 22.83H	R= 14.4RE
6 - 1976/266/ 5.00H	R= 1.7RE	13 - 1976/266/ 23.33H	R= 19.2RE		
7 - 1976/266/ 5.17H	R= 1.7RE	14 - 1976/267/ 6.33H	R= 20.3RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/265 /22.00H TO1976/267 /23.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/267/	23.17H	LAT=	67.9	11 - 1976/268/	12.50H	LAT=	48.1
2 - 1976/268/	1.83H	LAT=	61.1	12 - 1976/268/	14.67H	LAT=	57.2
3 - 1976/268/	4.17H	LAT=	51.3	13 - 1976/268/	16.17H	LAT=	65.6
4 - 1976/268/	6.00H	LAT=	36.8	14 - 1976/269/	0.00H	LAT=	80.9
5 - 1976/268/	8.25H	LAT=	-79.3	15 - 1976/269/	14.50H	LAT=	81.3
6 - 1976/268/	8.92H	LAT=	-68.9	16 - 1976/269/	19.00H	LAT=	78.2
7 - 1976/268/	8.75H	LAT=	-28.5	17 - 1976/269/	23.00H	LAT=	73.6
8 - 1976/268/	9.25H	LAT=	2.5				
9 - 1976/268/	10.00H	LAT=	23.4				
10 - 1976/268/	11.00H	LAT=	37.9				

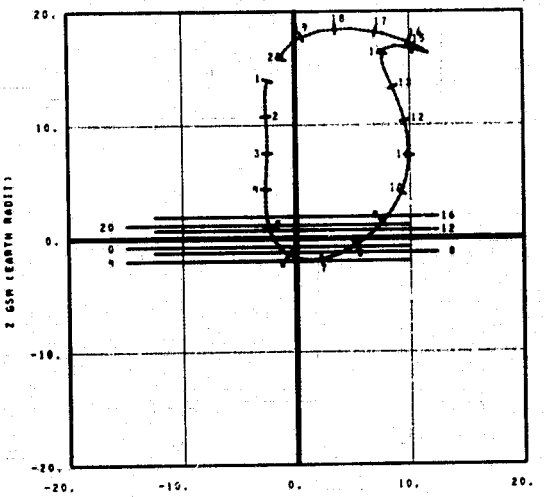
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/267/23.00H TO 1976/269/24.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/267/	23.17H	R=	14.2RE	11 - 1976/268/	15.67H	R=	12.6RE
2 - 1976/268/	2.33H	R=	11.1RE	12 - 1976/268/	17.67H	R=	14.4RE
3 - 1976/268/	4.75H	R=	7.9RE	13 - 1976/268/	20.00H	R=	16.1RE
4 - 1976/268/	6.42H	R=	5.1RE	14 - 1976/268/	24.00H	R=	18.2RE
5 - 1976/268/	7.58H	R=	2.7RE	15 - 1976/269/	5.50H	R=	19.9RE
6 - 1976/268/	8.33H	R=	1.7RE	16 - 1976/269/	13.00H	R=	20.1RE
7 - 1976/268/	9.07H	R=	2.9RE	17 - 1976/269/	15.50H	R=	19.7RE
8 - 1976/268/	10.22H	R=	5.2RE	18 - 1976/269/	18.00H	R=	18.9RE
9 - 1976/268/	11.75H	R=	7.6RE	19 - 1976/269/	20.50H	R=	17.9RE
10 - 1976/268/	13.58H	R=	10.3RE	20 - 1976/269/	24.00H	R=	15.9RE

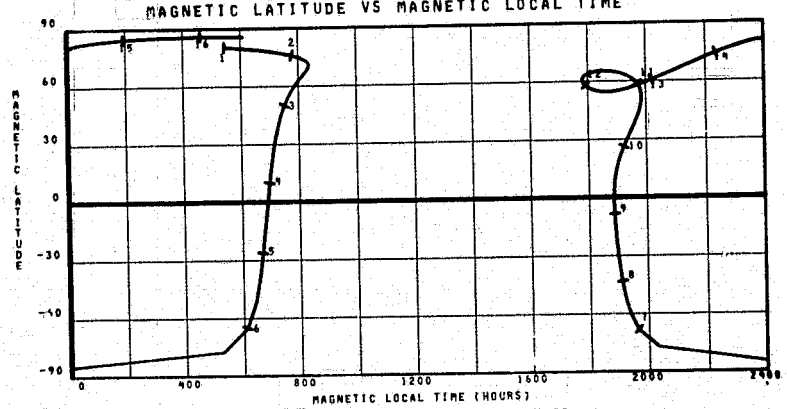
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/267/23.00H TO 1976/269/24.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

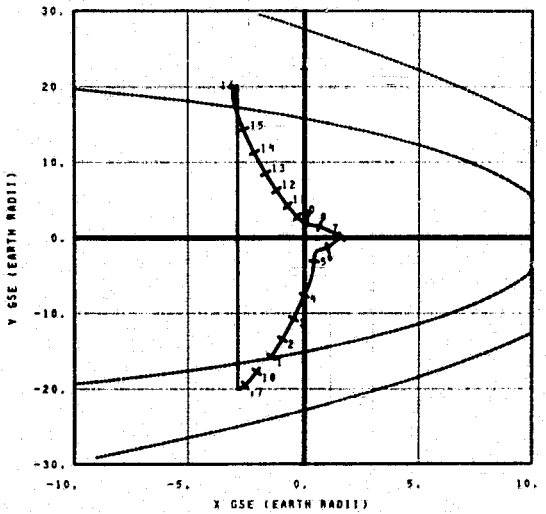
1 - 1976/267/	23.17H	R=	14.2RE	8 - 1976/268/	8.98H	R=	2.7RE	15 - 1976/269/	22.50H	R=	16.9RE
2 - 1976/268/	1.67H	R=	11.8RE	9 - 1976/268/	10.08H	R=	5.0RE	16 - 1976/269/	23.50H	R=	16.3RE
3 - 1976/268/	4.75H	R=	7.9RE	10 - 1976/268/	14.50H	R=	11.9RE				
4 - 1976/268/	7.75H	R=	2.3RE	11 - 1976/268/	21.33H	R=	16.9RE				
5 - 1976/268/	8.00H	R=	1.8RE	12 - 1976/269/	6.00H	R=	20.0RE				
6 - 1976/268/	8.33H	R=	1.7RE	13 - 1976/269/	14.50H	R=	19.9RE				
7 - 1976/268/	8.67H	R=	2.0RE	14 - 1976/269/	19.00H	R=	18.6RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/267/23.00H TO1976/269/24.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/270/	0.17H	LAT=	71.9	11 - 1976/270/	12.97H	LAT=	10.2
2 - 1976/270/	3.17H	LAT=	66.2	12 - 1976/270/	14.00H	LAT=	35.7
3 - 1976/270/	5.83H	LAT=	58.4	13 - 1976/270/	15.50H	LAT=	47.3
4 - 1976/270/	8.17H	LAT=	46.2	14 - 1976/270/	17.83H	LAT=	57.0
5 - 1976/270/	10.50H	LAT=	3.6	15 - 1976/270/	21.17H	LAT=	65.3
6 - 1976/270/	11.42H	LAT=	-73.9	16 - 1976/271/	9.33H	LAT=	79.8
7 - 1976/270/	11.50H	LAT=	-81.8	17 - 1976/271/	18.83H	LAT=	88.8
8 - 1976/270/	11.58H	LAT=	-79.5	18 - 1976/271/	23.83H	LAT=	76.6
9 - 1976/270/	11.75H	LAT=	-51.5				
10 - 1976/270/	12.25H	LAT=	-7.7				

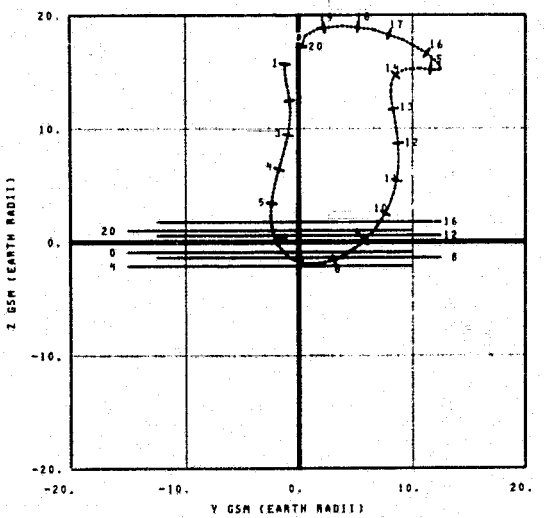
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/269/24.00H TO 1976/272/ 1.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/270/	0.17H	R=	15.0R_E	11 - 1976/270/	16.83H	R=	10.4R_E
2 - 1976/270/	3.17H	R=	12.5R_E	12 - 1976/270/	18.83H	R=	12.5R_E
3 - 1976/270/	5.83H	R=	9.5R_E	13 - 1976/270/	21.17H	R=	14.6R_E
4 - 1976/270/	8.75H	R=	6.7R_E	14 - 1976/271/	1.17H	R=	17.2R_E
5 - 1976/270/	10.08H	R=	4.2R_E	15 - 1976/271/	6.33H	R=	19.4R_E
6 - 1976/270/	11.08H	R=	2.1R_E	16 - 1976/271/	12.83H	R=	20.3R_E
7 - 1976/270/	11.75H	R=	1.0R_E	17 - 1976/271/	15.83H	R=	20.2R_E
8 - 1976/270/	12.33H	R=	3.5R_E	18 - 1976/271/	17.83H	R=	19.0R_E
9 - 1976/270/	13.75H	R=	5.8R_E	19 - 1976/271/	20.33H	R=	19.2R_E
10 - 1976/270/	19.17H	R=	8.1R_E	20 - 1976/272/	0.83H	R=	17.5R_E

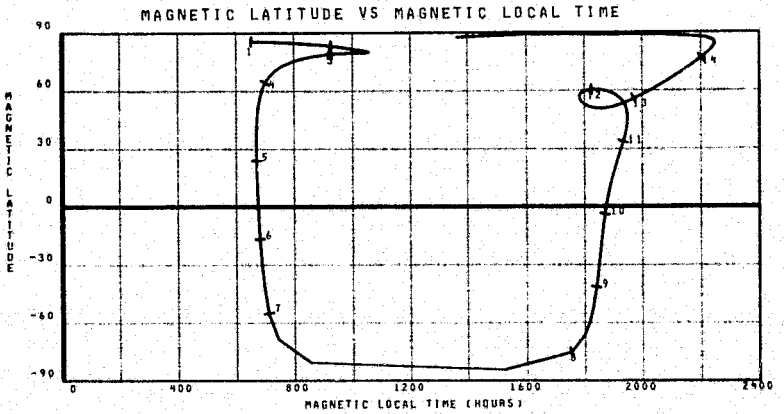
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/269/24.00H TO 1976/272/ 1.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

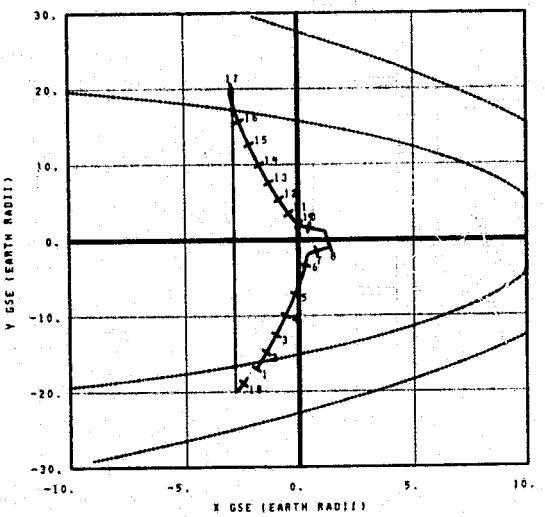
1 - 1976/270/	0.17H	R=	15.0R_E	8 - 1976/270/	11.83H	R=	2.0R_E
2 - 1976/270/	1.83H	R=	14.6R_E	9 - 1976/270/	12.25H	R=	2.6R_E
3 - 1976/270/	7.33H	R=	8.8R_E	10 - 1976/270/	13.50H	R=	5.4R_E
4 - 1976/270/	9.58H	R=	5.2R_E	11 - 1976/270/	17.50H	R=	11.1R_E
5 - 1976/270/	10.83H	R=	2.6R_E	12 - 1976/271/	1.33H	R=	17.3R_E
6 - 1976/270/	11.25H	R=	1.0R_E	13 - 1976/271/	13.83H	R=	20.3R_E
7 - 1976/270/	11.50H	R=	1.6R_E	14 - 1976/271/	20.33H	R=	19.2R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/269 /24.00H TO1976/272 / 1.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/272/	1.33 H	LAT=	74.0	11 - 1976/272/	15.02 H	LAT=	8.0
2 - 1976/272/	4.67 H	LAT=	69.7	12 - 1976/272/	16.77 H	LAT=	29.1
3 - 1976/272/	7.33 H	LAT=	63.8	13 - 1976/272/	18.00 H	LAT=	42.7
4 - 1976/272/	9.67 H	LAT=	55.9	14 - 1976/272/	19.83 H	LAT=	52.9
5 - 1976/272/	11.67 H	LAT=	43.8	15 - 1976/272/	22.33 H	LAT=	60.6
6 - 1976/272/	13.67 H	LAT=	0.7	16 - 1976/273/	2.17 H	LAT=	68.9
7 - 1976/272/	14.50 H	LAT=	-68.2	17 - 1976/273/	14.00 H	LAT=	81.5
8 - 1976/272/	14.67 H	LAT=	-79.4	18 - 1976/273/	24.00 H	LAT=	79.5
9 - 1976/272/	14.83 H	LAT=	-68.4				
10 - 1976/272/	15.00 H	LAT=	-36.0				

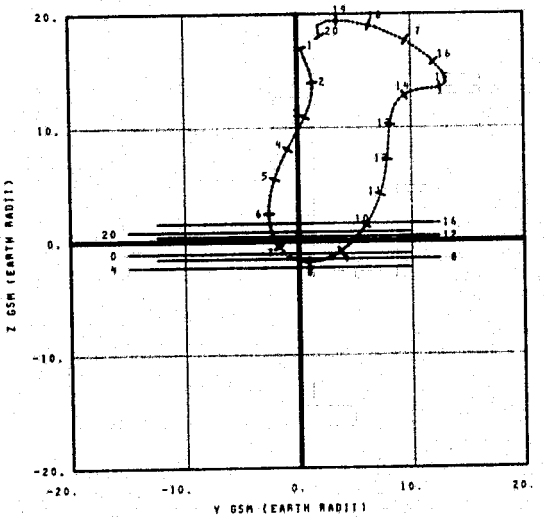
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/272/ 1.00H TO 1976/274/ 2.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/272/	1.33 H	R=	17.1 R_E	11 - 1976/272/	18.50 H	R=	8.9 R_E
2 - 1976/272/	5.67 H	R=	14.1 R_E	12 - 1976/272/	20.92 H	R=	10.8 R_E
3 - 1976/272/	8.83 H	R=	11.0 R_E	13 - 1976/272/	22.83 H	R=	13.3 R_E
4 - 1976/272/	11.00 H	R=	8.2 R_E	14 - 1976/273/	2.50 H	R=	16.1 R_E
5 - 1976/272/	12.92 H	R=	5.9 R_E	15 - 1976/273/	7.50 H	R=	18.7 R_E
6 - 1976/272/	13.50 H	R=	3.6 R_E	16 - 1976/273/	13.00 H	R=	20.1 R_E
7 - 1976/272/	14.92 H	R=	1.9 R_E	17 - 1976/273/	15.50 H	R=	20.3 R_E
8 - 1976/272/	15.00 H	R=	2.0 R_E	18 - 1976/273/	18.00 H	R=	20.2 R_E
9 - 1976/272/	15.93 H	R=	3.6 R_E	19 - 1976/273/	20.50 H	R=	19.9 R_E
10 - 1976/272/	17.17 H	R=	6.2 R_E	20 - 1976/274/	2.00 H	R=	18.3 R_E

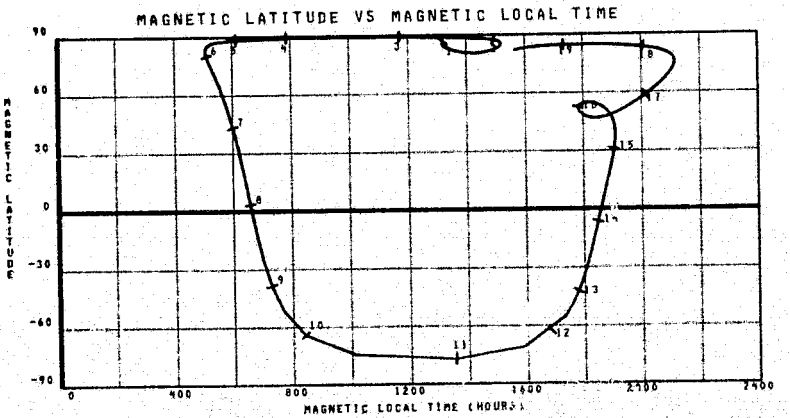
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/272/ 1.00H TO 1976/274/ 2.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

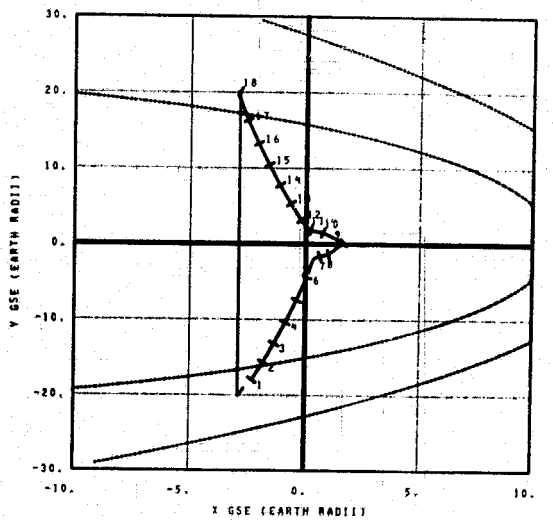
1 - 1976/272/	1.33 H	R=	17.1 R_E	8 - 1976/272/	14.25 H	R=	2.2 R_E	15 - 1976/272/	17.00 H	R=	9.0 R_E
2 - 1976/272/	5.33 H	R=	14.0 R_E	9 - 1976/272/	14.58 H	R=	1.7 R_E	16 - 1976/273/	0.00 H	R=	17.8 R_E
3 - 1976/272/	9.83 H	R=	9.6 R_E	10 - 1976/272/	14.75 H	R=	1.7 R_E	17 - 1976/273/	16.00 H	R=	20.3 R_E
4 - 1976/272/	10.00 H	R=	9.5 R_E	11 - 1976/272/	14.92 H	R=	1.8 R_E	18 - 1976/273/	23.00 H	R=	19.4 R_E
5 - 1976/272/	10.17 H	R=	9.3 R_E	12 - 1976/272/	15.08 H	R=	2.0 R_E	19 - 1976/274/	0.50 H	R=	18.7 R_E
6 - 1976/272/	11.42 H	R=	7.5 R_E	13 - 1976/272/	15.33 H	R=	2.5 R_E				
7 - 1976/272/	13.58 H	R=	3.6 R_E	14 - 1976/272/	16.25 H	R=	4.8 R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/272 / 1.00H TO 1976/274 / 2.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPPETATION OF TIME CODE-NUMBERS

1 - 1976/274/ 2.50H	LAT= 77.3	11 - 1976/274/ 18.17H	LAT= -91.0
2 - 1976/274/ 6.47H	LAT= 71.8	12 - 1976/274/ 18.83H	LAT= 0.6
3 - 1976/274/ 9.83H	LAT= 65.7	13 - 1976/274/ 19.92H	LAT= 28.2
4 - 1976/274/ 12.50H	LAT= 57.3	14 - 1976/274/ 21.42H	LAT= 43.5
5 - 1976/274/ 14.67H	LAT= 45.6	15 - 1976/274/ 23.42H	LAT= 53.8
6 - 1976/274/ 16.42H	LAT= 22.3	16 - 1976/275/ 2.17H	LAT= 62.1
7 - 1976/274/ 17.75H	LAT= -62.7	17 - 1976/275/ 4.33H	LAT= 69.8
8 - 1976/274/ 17.83H	LAT= -74.7	18 - 1976/275/ 20.83H	LAT= 81.8
9 - 1976/274/ 17.92H	LAT= -81.8		
10 - 1976/274/ 18.00H	LAT= -73.8		

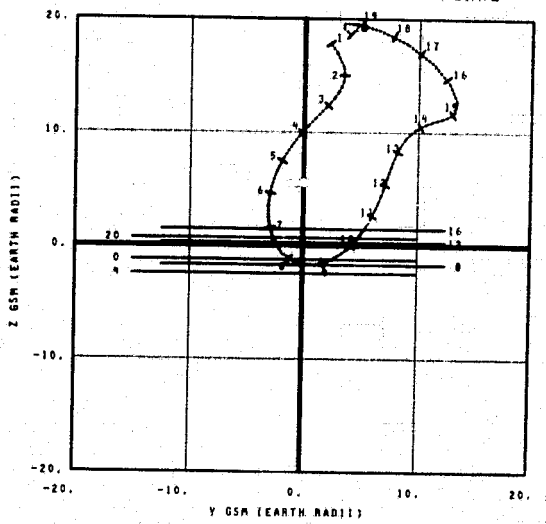
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/274/ 2.00H TO 1976/276/ 3.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/274/ 2.50H	R= 18.1R$_E$	11 - 1976/274/ 20.50H	R= 6.4R$_E$
2 - 1976/274/ 7.00H	R= 15.9R$_E$	12 - 1976/274/ 22.17H	R= 9.0R$_E$
3 - 1976/274/ 10.50H	R= 12.6R$_E$	13 - 1976/275/ 0.50H	R= 11.8R$_E$
4 - 1976/274/ 12.[illegible]H	R= 10.0R$_E$	14 - 1976/275/ 3.03H	R= 14.8R$_E$
5 - 1976/274/ 14.9[illegible]	R= 7.7R$_E$	15 - 1976/275/ 6.33H	R= 17.6R$_E$
6 - 1976/274/ 19.03H	R= 5.5R$_E$	16 - 1976/275/ 13.33H	R= 19.5R$_E$
7 - 1976/274/ 16.92H	R= 3.3R$_E$	17 - 1976/275/ 15.83H	R= 20.0R$_E$
8 - 1976/274/ 17.75H	R= 1.7R$_E$	18 - 1976/275/ 17.83H	R= 20.3R$_E$
9 - 1976/274/ 18.42H	R= 2.3R$_E$	19 - 1976/275/ 20.33H	R= 20.3R$_E$
10 - 1976/274/ 19.28H	R= 4.1R$_E$	20 - 1976/276/ 2.83H	R= 19.2R$_E$

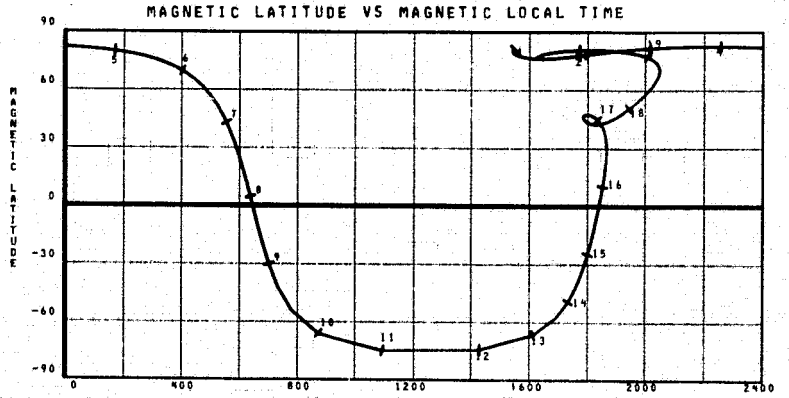
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/274/ 2.00H TO 1976/276/ 3.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

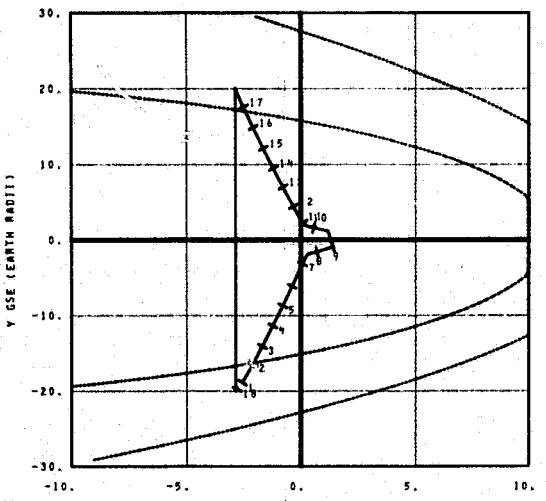
1 - 1976/274/ 2.50H	R= 18.1R$_E$	8 - 1976/274/ 17.33H	R= 2.4R$_E$	15 - 1976/274/ 18.67H	R= 2.0R$_E$
2 - 1976/274/ 9.00H	R= 14.0R$_E$	9 - 1976/274/ 17.67H	R= 1.8R$_E$	16 - 1976/274/ 19.75H	R= 5.0R$_E$
3 - 1976/274/ 11.17H	R= 11.9R$_E$	10 - 1976/274/ 17.92H	R= 1.6R$_E$	17 - 1976/274/ 23.92H	R= 11.1R$_E$
4 - 1976/274/ 12.17H	R= 10.8R$_E$	11 - 1976/274/ 18.00H	R= 1.7R$_E$	18 - 1976/275/ 14.33H	R= 19.8R$_E$
5 - 1976/274/ 13.33H	R= 9.4R$_E$	12 - 1976/274/ 18.00H	R= 1.7R$_E$	19 - 1976/275/ 21.83H	R= 20.3R$_E$
6 - 1976/274/ 14.83H	R= 7.2R$_E$	13 - 1976/274/ 18.17H	R= 1.9R$_E$	20 - 1976/276/ 0.33H	R= 19.8R$_E$
7 - 1976/274/ 16.50H	R= 4.2R$_E$	14 - 1976/274/ 18.33H	R= 2.1R$_E$		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/274 / 2.00H TO1976/276 / 3.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/276/ 3.33H	LAT= 79.5	11 - 1976/276/ 21.50H	LAT= -20.2		
2 - 1976/276/ 8.83H	LAT= 73.5	12 - 1976/276/ 22.65H	LAT= 19.5		
3 - 1976/276/ 12.00H	LAT= 68.0	13 - 1976/277/ 0.00H	LAT= 39.2		
4 - 1976/276/ 14.83H	LAT= 60.7	14 - 1976/277/ 1.83H	LAT= 50.9		
5 - 1976/276/ 17.00H	LAT= 51.5	15 - 1976/277/ 4.17H	LAT= 58.9		
6 - 1976/276/ 18.67H	LAT= 38.1	16 - 1976/277/ 7.33H	LAT= 66.1		
7 - 1976/276/ 20.17H	LAT= 5.1	17 - 1976/277/ 11.83H	LAT= 72.9		
8 - 1976/276/ 21.00H	LAT= -69.2	18 - 1976/278/ 3.00H	LAT= 81.5		
9 - 1976/276/ 21.08H	LAT= -80.0				
10 - 1976/276/ 21.25H	LAT= -67.9				

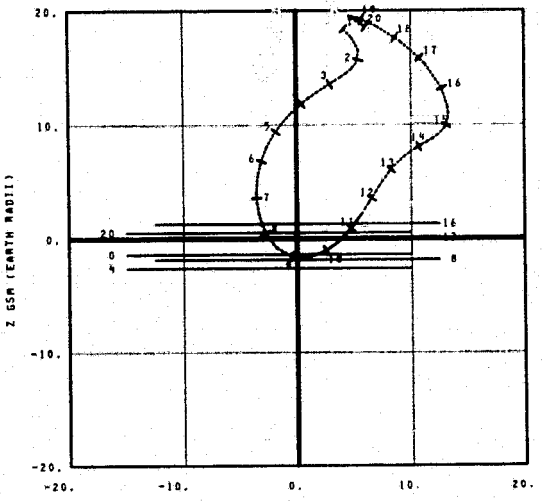
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/276/ 3.00H TO 1976/278/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/276/ 3.33H	R= 19.0RE	11 - 1976/276/ 22.02H	R= 9.8RE
2 - 1976/276/ 8.33H	R= 16.7RE	12 - 1976/277/ 0.33H	R= 7.4RE
3 - 1976/276/ 12.17H	R= 14.0RE	13 - 1976/277/ 2.42H	R= 10.3RE
4 - 1976/276/ 14.33H	R= 12.0RE	14 - 1976/277/ 5.50H	R= 13.5RE
5 - 1976/276/ 16.33H	R= 9.6RE	15 - 1976/277/ 9.67H	R= 16.6RE
6 - 1976/276/ 17.83H	R= 7.5RE	16 - 1976/277/ 13.50H	R= 18.5RE
7 - 1976/276/ 19.25H	R= 5.1RE	17 - 1976/277/ 16.00H	R= 19.9RE
8 - 1976/276/ 20.33H	R= 2.8RE	18 - 1976/277/ 18.00H	R= 19.9RE
9 - 1976/276/ 21.08H	R= 1.6RE	19 - 1976/277/ 21.00H	R= 20.2RE
10 - 1976/276/ 21.83H	R= 2.7RE	20 - 1976/278/ 9.00H	R= 19.7RE

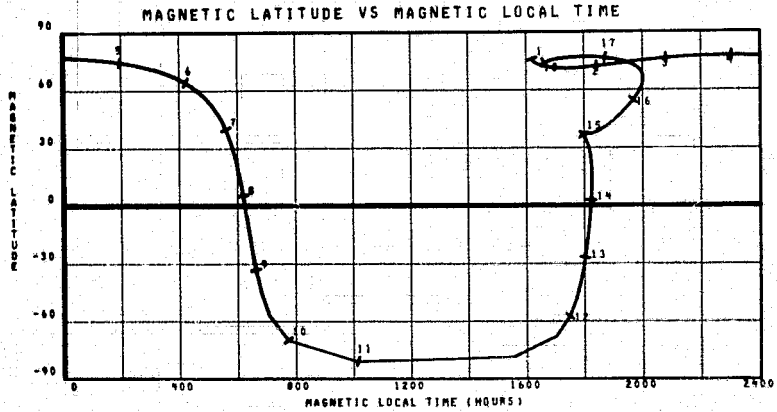
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/276/ 3.00H TO 1976/278/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

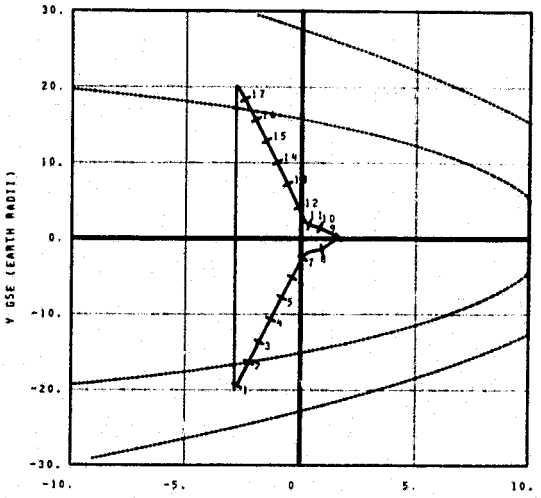
1 - 1976/276/ 3.33H	R= 19.0RE	8 - 1976/276/ 20.42H	R= 2.6RE	15 - 1976/277/ 2.00H	R= 9.8RE
2 - 1976/276/ 8.33H	R= 16.7RE	9 - 1976/276/ 20.83H	R= 1.9RE	16 - 1976/277/ 14.50H	R= 19.5RE
3 - 1976/276/ 12.17H	R= 13.6RE	10 - 1976/276/ 21.08H	R= 1.6RE	17 - 1976/277/ 21.00H	R= 20.3RE
4 - 1976/276/ 14.17H	R= 12.1RE	11 - 1976/276/ 21.17H	R= 1.7RE	18 - 1976/278/ 2.50H	R= 20.0RE
5 - 1976/276/ 16.03H	R= 10.3RE	12 - 1976/276/ 21.42H	R= 1.9RE		
6 - 1976/276/ 17.67H	R= 7.8RE	13 - 1976/276/ 21.75H	R= 2.6RE		
7 - 1976/276/ 19.50H	R= 4.8RE	14 - 1976/276/ 22.42H	R= 4.8RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/276 / 3.00H TO1976/276 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/278/	9.50H	LAT=	90.0	11 - 1976/279/	0.50H	LAT=	-58.9
2 - 1976/278/	12.00H	LAT=	73.6	12 - 1976/279/	1.72H	LAT=	16.1
3 - 1976/278/	15.67H	LAT=	67.1	13 - 1976/279/	3.42H	LAT=	48.2
4 - 1976/278/	18.67H	LAT=	58.6	14 - 1976/279/	5.50H	LAT=	52.4
5 - 1976/278/	20.83H	LAT=	47.6	15 - 1976/279/	8.17H	LAT=	61.6
6 - 1976/278/	22.92H	LAT=	30.6	16 - 1976/279/	11.67H	LAT=	68.8
7 - 1976/278/	23.67H	LAT=	-10.7	17 - 1976/279/	14.83H	LAT=	74.9
8 - 1976/279/	0.25H	LAT=	-75.3				
9 - 1976/279/	0.33H	LAT=	-81.7				
10 - 1976/279/	0.42H	LAT=	-73.1				

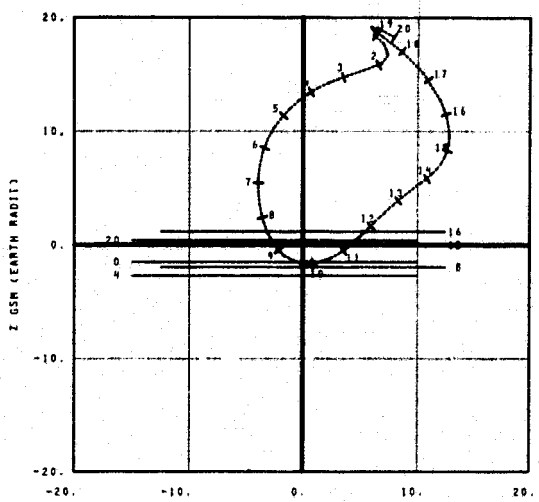
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/278/ 9.00H TO 1976/280/ 5.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/278/	9.50H	R=	19.6R_E	11 - 1976/279/	1.42H	R=	3.5R_E
2 - 1976/278/	10.50H	R=	17.3R_E	12 - 1976/279/	2.75H	R=	6.1R_E
3 - 1976/278/	13.67H	R=	15.3R_E	13 - 1976/279/	4.75H	R=	9.2R_E
4 - 1976/278/	15.83H	R=	13.6R_E	14 - 1976/279/	7.50H	R=	12.9R_E
5 - 1976/278/	17.83H	R=	11.6R_E	15 - 1976/279/	10.83H	R=	15.3R_E
6 - 1976/278/	19.83H	R=	9.3R_E	16 - 1976/279/	13.83H	R=	17.2R_E
7 - 1976/278/	21.58H	R=	6.8R_E	17 - 1976/279/	16.33H	R=	18.9R_E
8 - 1976/279/	22.83H	R=	4.3R_E	18 - 1976/279/	18.83H	R=	19.3R_E
9 - 1976/279/	23.83H	R=	2.2R_E	19 - 1976/279/	21.83H	R=	20.0R_E
10 - 1976/279/	0.50H	R=	1.9R_E	20 - 1976/280/	0.83H	R=	20.1R_E

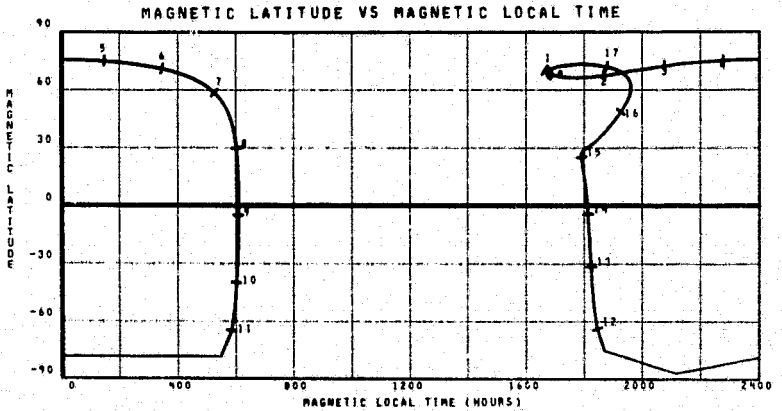
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/278/ 9.00H TO 1976/280/ 5.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

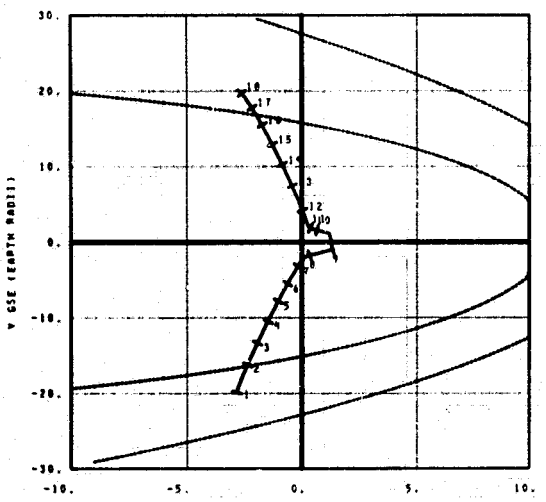
1 - 1976/278/	9.50H	R=	19.6R_E	8 - 1976/278/	23.00H	R=	4.0R_E	15 - 1976/279/	9.42H	R=	8.7R_E
2 - 1976/278/	10.50H	R=	17.3R_E	9 - 1976/278/	23.75H	R=	2.9R_E	16 - 1976/279/	11.83H	R=	10.2R_E
3 - 1976/278/	13.67H	R=	15.3R_E	10 - 1976/279/	0.08H	R=	1.8R_E	17 - 1976/279/	22.33H	R=	20.0R_E
4 - 1976/278/	15.58H	R=	13.9R_E	11 - 1976/279/	0.25H	R=	1.7R_E	18 - 1976/280/	2.33H	R=	20.3R_E
5 - 1976/278/	17.33H	R=	12.2R_E	12 - 1976/279/	0.58H	R=	1.9R_E				
6 - 1976/278/	18.83H	R=	10.5R_E	13 - 1976/279/	0.92H	R=	2.9R_E				
7 - 1976/278/	21.00H	R=	7.6R_E	14 - 1976/279/	1.50H	R=	5.7R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/278 / 9.00H TO1976/280 / 5.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/280/	5.33 H	LAT=	81.7	11 - 1976/281/	3.83 H	LAT=	-85.1
2 - 1976/280/	15.33 H	LAT=	73.5	12 - 1976/281/	4.95 H	LAT=	16.0
3 - 1976/280/	19.17 H	LAT=	66.5	13 - 1976/281/	6.75 H	LAT=	41.2
4 - 1976/280/	22.00 H	LAT=	58.2	14 - 1976/281/	8.83 H	LAT=	52.9
5 - 1976/280/	24.00 H	LAT=	47.9	15 - 1976/281/	11.33 H	LAT=	60.8
6 - 1976/281/	1.92 H	LAT=	33.9	16 - 1976/281/	14.50 H	LAT=	67.9
7 - 1976/281/	2.58 H	LAT=	5.1	17 - 1976/281/	18.50 H	LAT=	73.1
8 - 1976/281/	3.33 H	LAT=	-57.6	18 - 1976/282/	0.50 H	LAT=	79.0
9 - 1976/281/	3.50 H	LAT=	-80.3				
10 - 1976/281/	3.67 H	LAT=	-67.1				

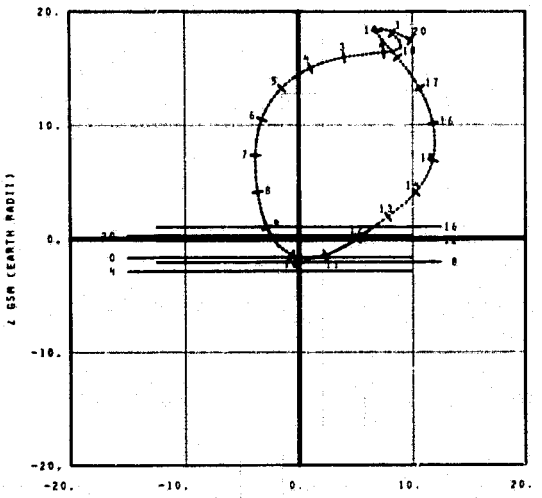
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/280/ 5.00H TO 1976/282/ 6.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/280/	5.33 H	R=	20.1 R_E	11 - 1976/281/	4.25 H	R=	2.7 R_E
2 - 1976/280/	11.83 H	R=	10.2 R_E	12 - 1976/281/	5.42 H	R=	9.2 R_E
3 - 1976/280/	19.03 H	R=	16.7 R_E	13 - 1976/281/	7.17 H	R=	8.1 R_E
4 - 1976/280/	17.00 H	R=	19.2 R_E	14 - 1976/281/	9.50 H	R=	11.1 R_E
5 - 1976/280/	19.17 H	R=	13.5 R_E	15 - 1976/281/	12.17 H	R=	13.8 R_E
6 - 1976/280/	21.50 H	R=	11.1 R_E	16 - 1976/281/	14.67 H	R=	15.7 R_E
7 - 1976/280/	23.67 H	R=	8.4 R_E	17 - 1976/281/	17.00 H	R=	17.1 R_E
8 - 1976/281/	1.92 H	R=	5.5 R_E	18 - 1976/281/	19.50 H	R=	18.4 R_E
9 - 1976/281/	2.67 H	R=	3.8 R_E	19 - 1976/281/	24.00 H	R=	19.8 R_E
10 - 1976/281/	3.50 H	R=	1.6 R_E	20 - 1976/282/	6.00 H	R=	20.3 R_E

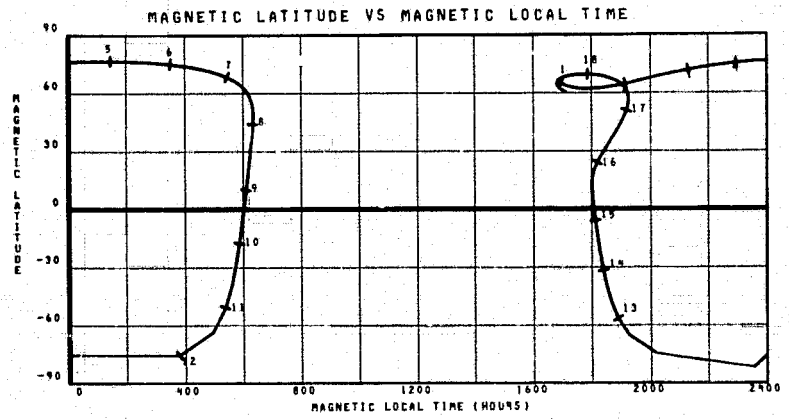
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/280/ 5.00H TO 1976/282/ 6.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

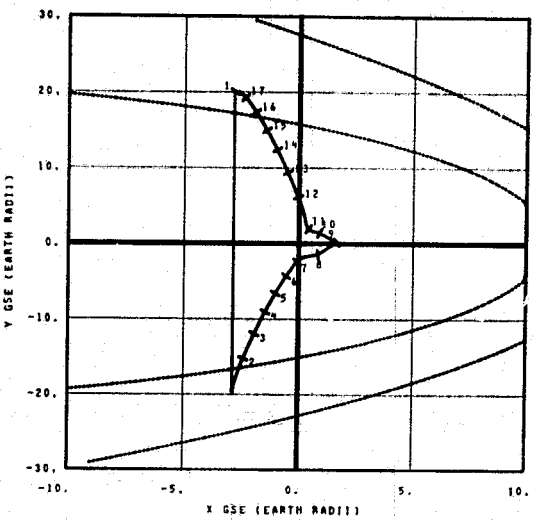
1 - 1976/280/	5.33 H	R=	20.1 R_E	8 - 1976/281/	1.79 H	R=	4.9 R_E
2 - 1976/280/	11.83 H	R=	10.2 R_E	9 - 1976/281/	2.83 H	R=	2.6 R_E
3 - 1976/280/	19.03 H	R=	16.7 R_E	10 - 1976/281/	3.17 H	R=	2.0 R_E
4 - 1976/280/	17.00 H	R=	19.2 R_E	11 - 1976/281/	3.42 H	R=	1.7 R_E
5 - 1976/280/	19.03 H	R=	13.6 R_E	12 - 1976/281/	3.58 H	R=	1.7 R_E
6 - 1976/280/	20.33 H	R=	12.4 R_E	13 - 1976/281/	3.92 H	R=	2.1 R_E
7 - 1976/280/	22.50 H	R=	10.0 R_E	14 - 1976/281/	4.25 H	R=	2.7 R_E
				15 - 1976/281/	5.08 H	R=	4.9 R_E
				16 - 1976/281/	16.08 H	R=	11.7 R_E
				17 - 1976/281/	17.33 H	R=	17.3 R_E
				18 - 1976/281/	23.50 H	R=	19.7 R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/280 / 5.00H TO1976/282 / 6.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/282/ 6.50 H	LAT= 81.8	11 - 1976/283/ 7.00 H	LAT= -60.2
2 - 1976/282/ 20.00 H	LAT= 71.2	12 - 1976/283/ 9.17 H	LAT= 33.6
3 - 1976/282/ 23.83 H	LAT= 62.8	13 - 1976/283/ 11.33 H	LAT= 49.7
4 - 1976/283/ 2.33 H	LAT= 53.2	14 - 1976/283/ 19.00 H	LAT= 59.3
5 - 1976/283/ 4.00 H	LAT= 41.9	15 - 1976/283/ 17.00 H	LAT= 66.1
6 - 1976/283/ 5.25 H	LAT= 22.4	16 - 1976/283/ 20.83 H	LAT= 72.8
7 - 1976/283/ 6.17 H	LAT= -16.9	17 - 1976/284/ 1.83 H	LAT= 77.4
8 - 1976/283/ 6.67 H	LAT= -75.7		
9 - 1976/283/ 6.75 H	LAT= -81.6		
10 - 1976/283/ 6.83 H	LAT= -72.7		

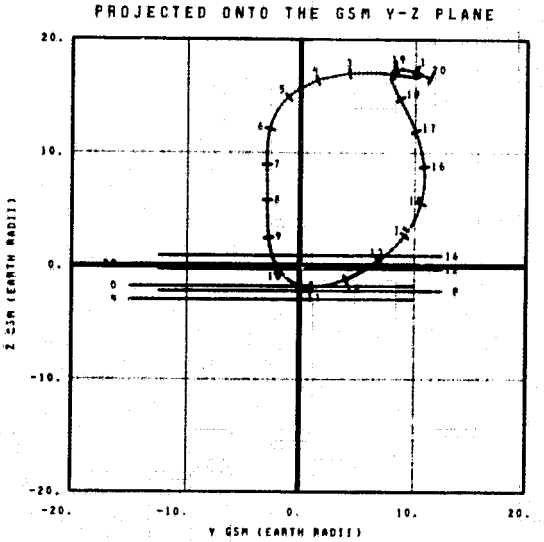
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/282/ 6.00H TO 1976/284/ 7.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/282/ 6.50 H	R= 20.3 R_E	11 - 1976/283/ 7.17 H	R= 2.1 R_E
2 - 1976/282/ 13.00 H	R= 19.0 R_E	12 - 1976/283/ 8.12 H	R= 9.2 R_E
3 - 1976/282/ 16.00 H	R= 17.0 R_E	13 - 1976/283/ 9.50 H	R= 6.9 R_E
4 - 1976/282/ 18.00 H	R= 16.7 R_E	14 - 1976/283/ 11.42 H	R= 9.5 R_E
5 - 1976/282/ 20.33 H	R= 15.2 R_E	15 - 1976/283/ 13.50 H	R= 12.0 R_E
6 - 1976/282/ 23.33 H	R= 12.6 R_E	16 - 1976/283/ 15.67 H	R= 14.0 R_E
7 - 1976/283/ 2.00 H	R= 9.6 R_E	17 - 1976/283/ 17.83 H	R= 15.7 R_E
8 - 1976/283/ 4.00 H	R= 6.6 R_E	18 - 1976/283/ 20.33 H	R= 17.2 R_E
9 - 1976/283/ 5.50 H	R= 3.8 R_E	19 - 1976/284/ 1.83 H	R= 19.4 R_E
10 - 1976/283/ 6.42 H	R= 1.9 R_E	20 - 1976/284/ 6.83 H	R= 20.3 R_E

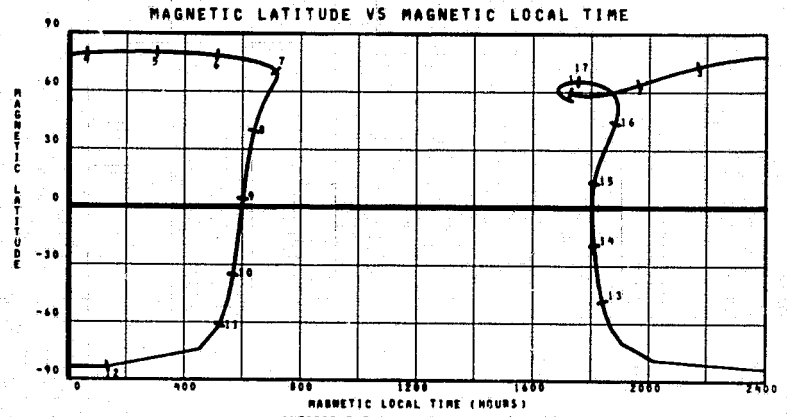
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/282/ 6.00H TO 1976/284/ 7.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

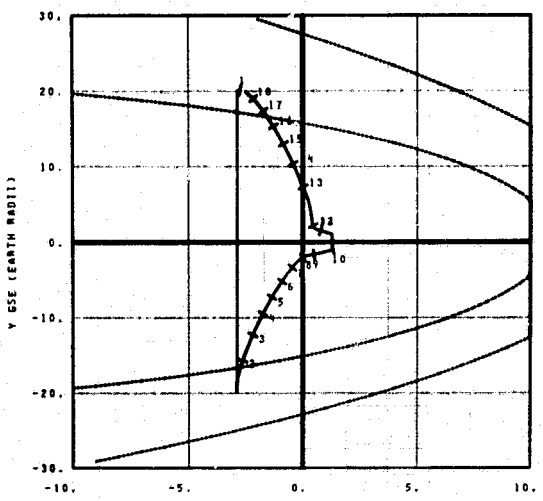
1 - 1976/282/ 6.50 H	R= 20.3 R_E	8 - 1976/283/ 6.58 H	R= 3.4 R_E	15 - 1976/283/ 16.75 H	R= 6.4 R_E
2 - 1976/282/ 13.00 H	R= 19.0 R_E	9 - 1976/283/ 6.75 H	R= 2.2 R_E	16 - 1976/283/ 16.83 H	R= 14.9 R_E
3 - 1976/282/ 17.00 H	R= 17.0 R_E	10 - 1976/283/ 6.83 H	R= 1.7 R_E	17 - 1976/283/ 20.83 H	R= 18.0 R_E
4 - 1976/282/ 19.07 H	R= 16.6 R_E	11 - 1976/283/ 6.75 H	R= 1.6 R_E		
5 - 1976/282/ 21.17 H	R= 15.0 R_E	12 - 1976/283/ 6.92 H	R= 1.4 R_E		
6 - 1976/282/ 23.67 H	R= 12.3 R_E	13 - 1976/283/ 7.33 H	R= 2.0 R_E		
7 - 1976/283/ 2.17 H	R= 9.4 R_E	14 - 1976/283/ 8.08 H	R= 3.9 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/282 / 6.00H TO1976/284 / 7.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/284/	7.33 H	LAT=	81.1	11 - 1976/285/	10.00 H	LAT=	-66.7
2 - 1976/284/	22.50 H	LAT=	72.4	12 - 1976/285/	10.42 H	LAT=	-27.7
3 - 1976/285/	2.67 H	LAT=	63.9	13 - 1976/285/	13.00 H	LAT=	40.5
4 - 1976/285/	5.17 H	LAT=	55.1	14 - 1976/285/	15.33 H	LAT=	53.1
5 - 1976/285/	6.75 H	LAT=	45.5	15 - 1976/285/	17.83 H	LAT=	60.9
6 - 1976/285/	8.00 H	LAT=	31.4	16 - 1976/285/	20.67 H	LAT=	66.8
7 - 1976/285/	8.92 H	LAT=	8.5	17 - 1976/285/	24.00 H	LAT=	71.8
8 - 1976/285/	9.58 H	LAT=	-36.7	18 - 1976/286/	4.00 H	LAT=	76.4
9 - 1976/285/	9.83 H	LAT=	-78.8				
10 - 1976/285/	9.92 H	LAT=	-60.5				

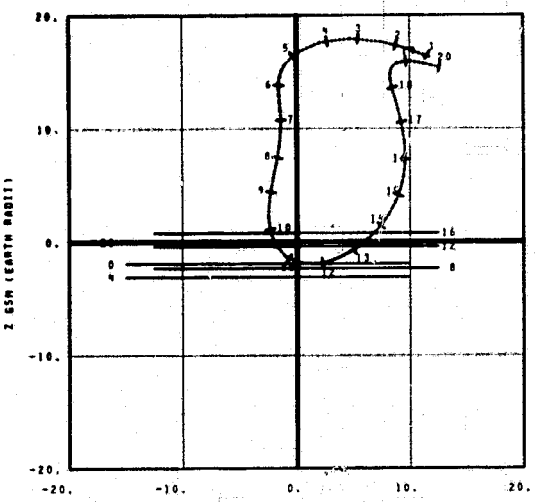
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/284/ 7.00H TO 1976/286/ 8.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/284/	7.33 H	R=	20.3RE	11 - 1976/285/	10.00 H	R=	1.7RE
2 - 1976/284/	13.03 H	R=	19.7RE	12 - 1976/285/	10.75 H	R=	2.9RE
3 - 1976/284/	16.33 H	R=	19.0RE	13 - 1976/285/	11.00 H	R=	5.1RE
4 - 1976/284/	18.33 H	R=	18.2RE	14 - 1976/285/	13.25 H	R=	7.6RE
5 - 1976/284/	21.33 H	R=	16.6RE	15 - 1976/285/	14.92 H	R=	9.9RE
6 - 1976/285/	0.03 H	R=	14.1RE	16 - 1976/285/	16.03 H	R=	12.1RE
7 - 1976/285/	4.00 H	R=	11.8RE	17 - 1976/285/	19.00 H	R=	14.1RE
8 - 1976/285/	6.50 H	R=	7.8RE	18 - 1976/285/	21.67 H	R=	16.1RE
9 - 1976/285/	8.00 H	R=	5.1RE	19 - 1976/286/	3.00 H	R=	18.8RE
10 - 1976/285/	9.25 H	R=	2.6RE	20 - 1976/286/	8.00 H	R=	20.1RE

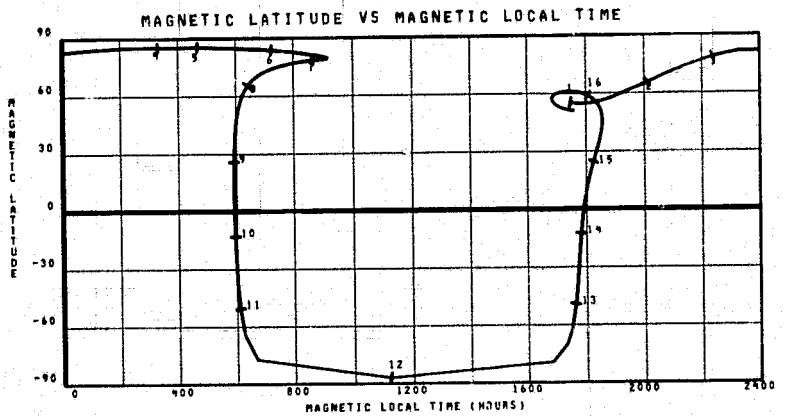
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/284/ 7.00H TO 1976/286/ 8.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

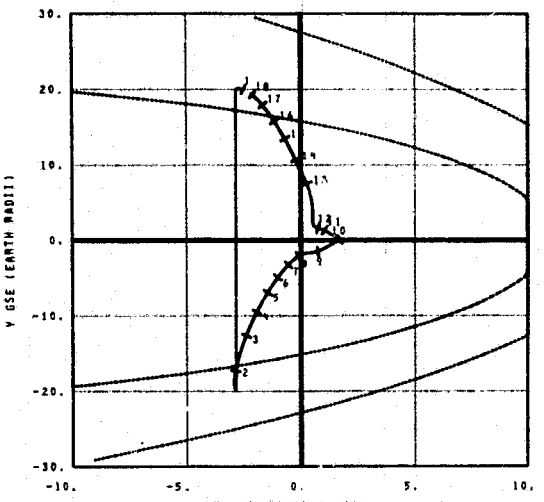
1 - 1976/284/	7.33 H	R=	20.3RE	8 - 1976/285/	7.92 H	R=	5.4RE	15 - 1976/285/	14.92 H	R=	9.9RE
2 - 1976/284/	13.33 H	R=	19.3RE	9 - 1976/285/	9.25 H	R=	2.6RE	16 - 1976/285/	21.83 H	R=	16.2RE
3 - 1976/284/	19.33 H	R=	17.7RE	10 - 1976/285/	9.67 H	R=	1.8RE				
4 - 1976/284/	22.33 H	R=	16.0RE	11 - 1976/285/	9.92 H	R=	1.6RE				
5 - 1976/285/	02.83 H	R=	13.7RE	12 - 1976/285/	10.17 H	R=	1.8RE				
6 - 1976/285/	6.17 H	R=	9.7RE	13 - 1976/285/	10.58 H	R=	2.6RE				
7 - 1976/285/	9.33 H	R=	9.4RE	14 - 1976/285/	11.95 H	R=	4.6RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/284 / 7.00H TO1976/286 / 8.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/286/ 8.50 H	LAT= 80.0	11 - 1976/287/ 13.25 H	LAT= -72.4
2 - 1976/286/ 23.00 H	LAT= 76.2	12 - 1976/287/ 13.33 H	LAT= -69.9
3 - 1976/287/ 5.50 H	LAT= 65.0	13 - 1976/287/ 16.42 H	LAT= 91.9
4 - 1976/287/ 8.33 H	LAT= 55.9	14 - 1976/287/ 18.75 H	LAT= 53.9
5 - 1976/287/ 10.17 H	LAT= 43.8	15 - 1976/287/ 21.50 H	LAT= 62.0
6 - 1976/287/ 11.33 H	LAT= 29.9	16 - 1976/288/ 0.50 H	LAT= 67.0
7 - 1976/287/ 12.17 H	LAT= 7.0	17 - 1976/288/ 4.33 H	LAT= 73.2
8 - 1976/287/ 12.75 H	LAT= -32.0	18 - 1976/289/ 8.33 H	LAT= 77.4
9 - 1976/287/ 13.08 H	LAT= -75.7		
10 - 1976/287/ 13.17 H	LAT= -81.6		

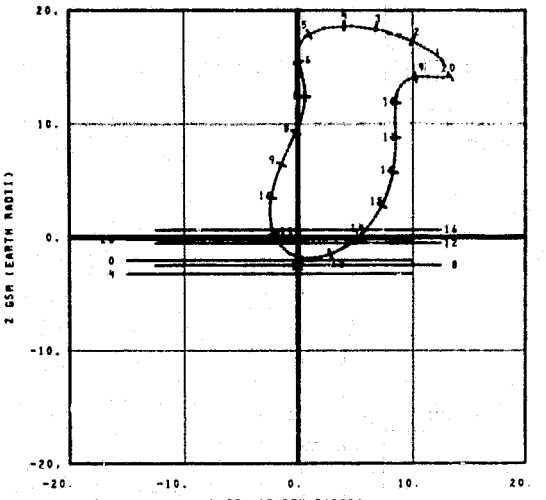
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/286/ 8.00H TO 1976/288/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/286/ 6.50 H	R= 20.1 R_E	11 - 1976/287/ 12.67 H	R= 2.2 R_E
2 - 1976/286/ 14.00 H	R= 20.2 R_E	12 - 1976/287/ 13.33 H	R= 1.8 R_E
3 - 1976/286/ 16.50 H	R= 19.8 R_E	13 - 1976/287/ 14.00 H	R= 3.2 R_E
4 - 1976/286/ 18.50 H	R= 19.3 R_E	14 - 1976/287/ 15.17 H	R= 5.4 R_E
5 - 1976/286/ 21.50 H	R= 18.2 R_E	15 - 1976/287/ 16.50 H	R= 7.8 R_E
6 - 1976/287/ 2.00 H	R= 15.7 R_E	16 - 1976/287/ 18.25 H	R= 10.1 R_E
7 - 1976/287/ 5.67 H	R= 12.7 R_E	17 - 1976/287/ 20.17 H	R= 12.2 R_E
8 - 1976/287/ 8.50 H	R= 9.5 R_E	18 - 1976/287/ 22.83 H	R= 14.4 R_E
9 - 1976/287/ 10.33 H	R= 6.8 R_E	19 - 1976/288/ 3.33 H	R= 17.5 R_E
10 - 1976/287/ 11.67 H	R= 4.3 R_E	20 - 1976/288/ 8.83 H	R= 19.6 R_E

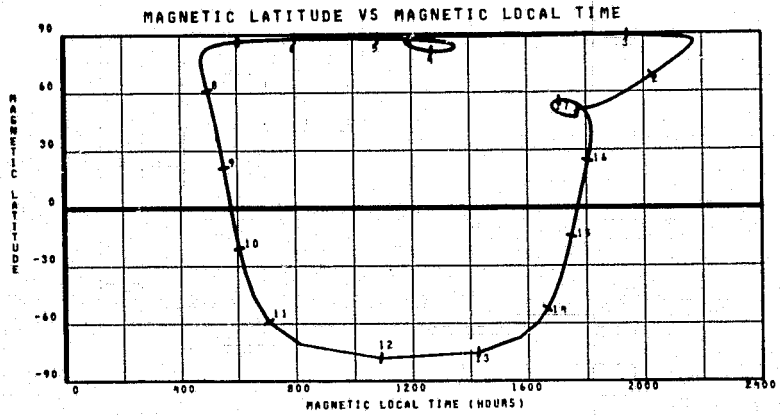
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/286/ 8.00H TO 1976/288/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

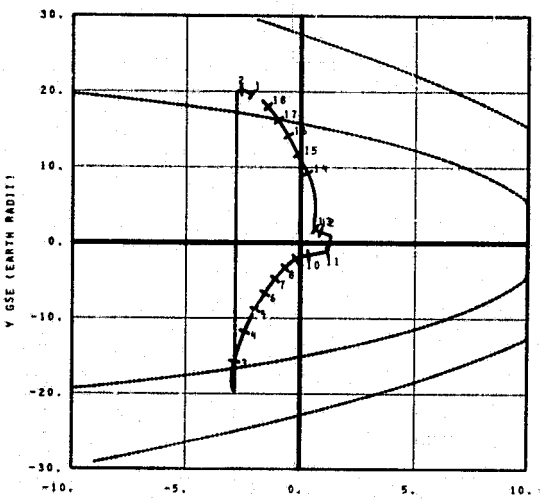
1 - 1976/286/ 8.50 H	R= 20.1 R_E	8 - 1976/287/ 11.92 H	R= 4.0 R_E	15 - 1976/287/ 19.92 H	R= 3.9 R_E
2 - 1976/286/ 17.00 H	R= 19.7 R_E	9 - 1976/287/ 12.50 H	R= 2.5 R_E	16 - 1976/287/ 19.92 H	R= 8.3 R_E
3 - 1976/286/ 23.00 H	R= 17.5 R_E	10 - 1976/287/ 12.92 H	R= 1.0 R_E	17 - 1976/288/ 8.67 H	R= 16.0 R_E
4 - 1976/287/ 3.67 H	R= 14.4 R_E	11 - 1976/287/ 13.17 H	R= 1.0 R_E		
5 - 1976/287/ 8.33 H	R= 9.7 R_E	12 - 1976/287/ 13.33 H	R= 1.9 R_E		
6 - 1976/287/ 8.67 H	R= 9.2 R_E	13 - 1976/287/ 13.42 H	R= 1.9 R_E		
7 - 1976/287/ 9.00 H	R= 8.8 R_E	14 - 1976/287/ 13.67 H	R= 2.3 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/286 / 8.00H TO 1976/288 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/288/ 9.33H	LAT= 76.2	11 - 1976/289/ 16.33H	LAT= -80.3
2 - 1976/288/ 13.03H	LAT= 81.5	12 - 1976/289/ 16.50H	LAT= -67.0
3 - 1976/288/ 16.33H	LAT= 72.7	13 - 1976/289/ 16.67H	LAT= -49.0
4 - 1976/289/ 9.50H	LAT= 62.7	14 - 1976/289/ 20.83H	LAT= 18.9
5 - 1976/289/ 12.68H	LAT= 53.2	15 - 1976/289/ 22.83H	LAT= 36.9
6 - 1976/289/ 13.50H	LAT= 42.6	16 - 1976/290/ 1.50H	LAT= 63.7
7 - 1976/289/ 14.98H	LAT= 28.8	17 - 1976/290/ 9.33H	LAT= 68.8
8 - 1976/289/ 15.33H	LAT= 8.9	18 - 1976/290/ 7.67H	LAT= 73.3
9 - 1976/289/ 15.92H	LAT= -27.9		
10 - 1976/289/ 16.29H	LAT= -69.6		

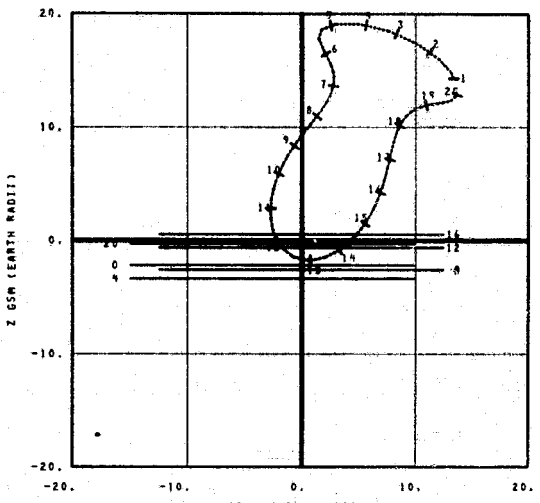
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/288/ 9.00H TO 1976/290/10.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/288/ 9.33H	R= 19.7RE	11 - 1976/289/ 15.00H	R= 4.1RE
2 - 1976/288/ 13.03H	R= 20.3RE	12 - 1976/289/ 15.92H	R= 2.1RE
3 - 1976/288/ 16.33H	R= 20.3RE	13 - 1976/289/ 16.67H	R= 1.9RE
4 - 1976/289/ 10.33H	R= 20.0RE	14 - 1976/289/ 17.40H	R= 3.4RE
5 - 1976/288/ 21.33H	R= 19.4RE	15 - 1976/289/ 18.58H	R= 5.8RE
6 - 1976/289/ 3.33H	R= 16.9RE	16 - 1976/289/ 20.00H	R= 8.1RE
7 - 1976/289/ 7.17H	R= 14.2RE	17 - 1976/289/ 21.83H	R= 10.5RE
8 - 1976/289/ 10.17H	R= 11.3RE	18 - 1976/290/ 0.50H	R= 13.3RE
9 - 1976/289/ 12.33H	R= 8.6RE	19 - 1976/290/ 9.33H	R= 16.3RE
10 - 1976/289/ 13.75H	R= 6.9RE	20 - 1976/290/ 9.67H	R= 18.9RE

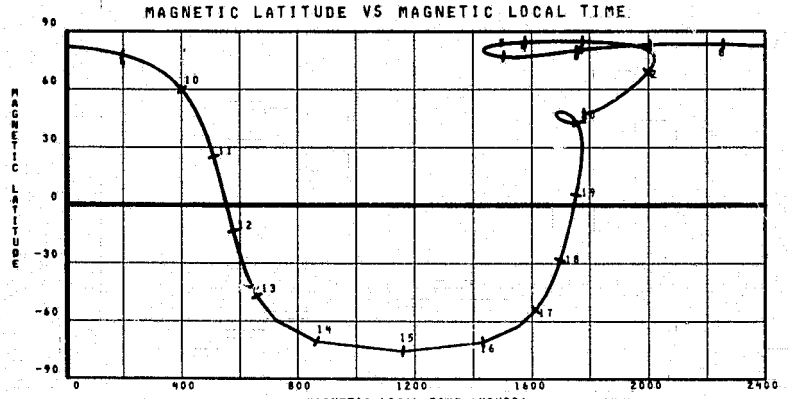
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/288/ 9.00H TO 1976/290/10.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

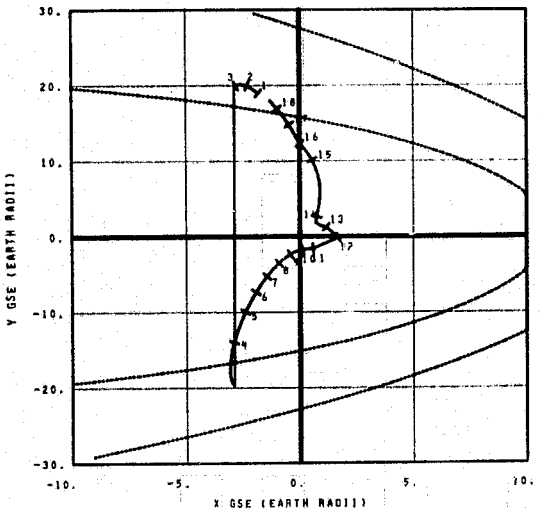
1 - 1976/288/ 9.33H	R= 19.7RE	8 - 1976/289/ 11.17H	R= 10.2RE	15 - 1976/289/ 16.50H	R= 1.7RE
2 - 1976/288/ 13.03H	R= 20.1RE	9 - 1976/289/ 12.50H	R= 8.4RE	16 - 1976/289/ 16.58H	R= 1.0RE
3 - 1976/288/ 22.83H	R= 18.9RE	10 - 1976/289/ 14.25H	R= 5.8RE	17 - 1976/289/ 16.75H	R= 2.1RE
4 - 1976/289/ 23.83H	R= 18.0RE	11 - 1976/289/ 15.58H	R= 3.0RE	18 - 1976/289/ 17.08H	R= 2.7RE
5 - 1976/289/ 0.83H	R= 16.9RE	12 - 1976/289/ 16.00H	R= 2.0RE	19 - 1976/289/ 18.92H	R= 4.7RE
6 - 1976/289/ 8.83H	R= 12.7RE	13 - 1976/289/ 16.25H	R= 1.7RE	20 - 1976/289/ 21.75H	R= 10.4RE
7 - 1976/289/ 10.33H	R= 11.1RE	14 - 1976/289/ 16.42H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/288 / 9.00H TO1976/290 /10.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/290/ 10.17H	LAT= 76.0	11 - 1976/291/ 19.50H	LAT= -75.1		
2 - 1976/290/ 14.67H	LAT= 79.8	12 - 1976/291/ 19.50H	LAT= -81.0		
3 - 1976/290/ 20.67H	LAT= 81.0	13 - 1976/291/ 19.67H	LAT= -73.2		
4 - 1976/291/ 10.33H	LAT= 68.8	14 - 1976/291/ 20.20H	LAT= -10.3		
5 - 1976/291/ 14.33H	LAT= 57.4	15 - 1976/292/ 0.75H	LAT= 52.2		
6 - 1976/291/ 16.25H	LAT= 46.8	16 - 1976/292/ 2.67H	LAT= 50.7		
7 - 1976/291/ 17.50H	LAT= 33.8	17 - 1976/292/ 5.50H	LAT= 65.2		
8 - 1976/291/ 18.42H	LAT= 13.7	18 - 1976/292/ 8.67H	LAT= 78.4		
9 - 1976/291/ 19.00H	LAT= -16.2				
10 - 1976/291/ 19.42H	LAT= -63.0				

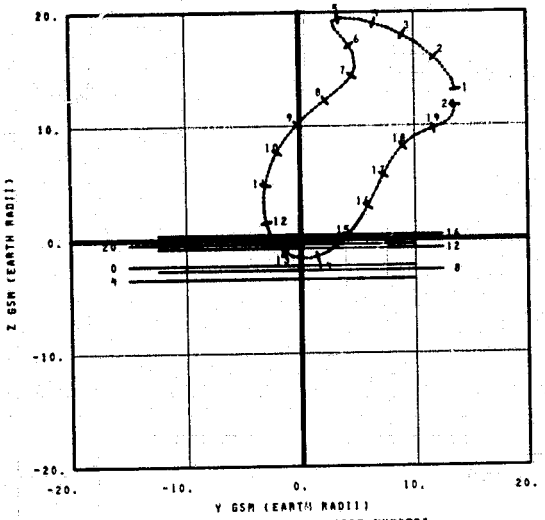
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/290/10.00H TO 1976/292/11.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/290/ 10.17H	R= 19.0RE	11 - 1976/291/ 17.25H	R= 5.9RE
2 - 1976/290/ 14.17H	R= 20.0RE	12 - 1976/291/ 18.50H	R= 3.5RE
3 - 1976/290/ 16.67H	R= 20.3RE	13 - 1976/291/ 19.33H	R= 1.8RE
4 - 1976/290/ 18.67H	R= 20.3RE	14 - 1976/291/ 20.08H	R= 2.1RE
5 - 1976/290/ 22.17H	R= 20.0RE	15 - 1976/291/ 20.98H	R= 4.0RE
6 - 1976/291/ 4.67H	R= 17.9RE	16 - 1976/291/ 22.25H	R= 6.6RE
7 - 1976/291/ 8.83H	R= 15.9RE	17 - 1976/291/ 24.00H	R= 9.2RE
8 - 1976/291/ 12.00H	R= 12.6RE	18 - 1976/292/ 2.98H	R= 12.1RE
9 - 1976/291/ 14.17H	R= 10.4RE	19 - 1976/292/ 6.00H	R= 15.2RE
10 - 1976/291/ 15.83H	R= 8.2RE	20 - 1976/292/ 10.83H	R= 18.0RE

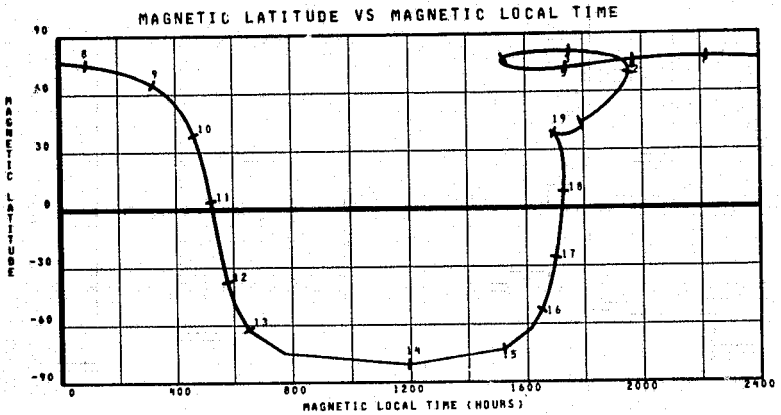
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/290/10.00H TO 1976/292/11.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

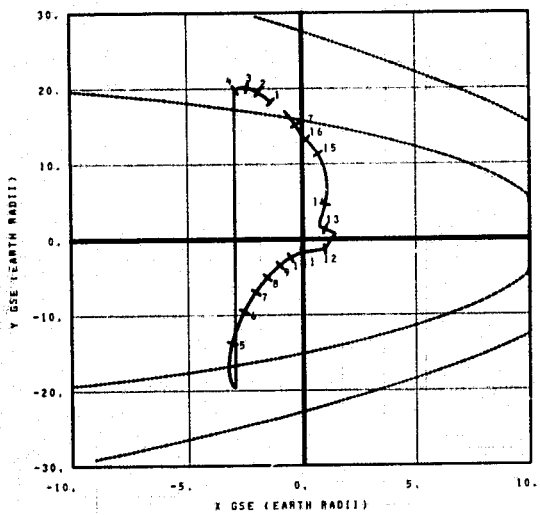
1 - 1976/290/ 10.17H	R= 19.0RE	8 - 1976/291/ 19.50H	R= 10.0RE	15 - 1976/291/ 19.79H	R= 1.7RE
2 - 1976/290/ 14.67H	R= 20.3RE	9 - 1976/291/ 19.29H	R= 7.5RE	16 - 1976/291/ 19.92H	R= 1.0RE
3 - 1976/290/ 22.67H	R= 19.9RE	10 - 1976/291/ 19.08H	R= 4.3RE	17 - 1976/291/ 20.23H	R= 2.6RE
4 - 1976/291/ 1.67H	R= 19.1RE	11 - 1976/291/ 18.92H	R= 2.6RE	18 - 1976/291/ 21.13H	R= 5.5RE
5 - 1976/291/ 8.50H	R= 15.6RE	12 - 1976/291/ 19.33H	R= 1.0RE	19 - 1976/292/ 4.03H	R= 14.3RE
6 - 1976/291/ 11.33H	R= 13.4RE	13 - 1976/291/ 19.58H	R= 1.7RE		
7 - 1976/291/ 15.00H	R= 11.7RE	14 - 1976/291/ 19.67H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/290 /10.00H TO1976/292 /11.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/292/ 11.33 H	LAT= 73.8	11 - 1976/293/ 22.58 H	LAT= -56.9
2 - 1976/292/ 15.33 H	LAT= 77.8	12 - 1976/293/ 22.75 H	LAT= -79.7
3 - 1976/292/ 19.33 H	LAT= 80.6	13 - 1976/293/ 22.92 H	LAT= -67.7
4 - 1976/293/ 0.83 H	LAT= 81.7	14 - 1976/294/ 0.97 H	LAT= 22.5
5 - 1976/293/ 13.83 H	LAT= 68.3	15 - 1976/294/ 5.00 H	LAT= 56.8
6 - 1976/293/ 17.83 H	LAT= 56.3	16 - 1976/294/ 6.83 H	LAT= 61.2
7 - 1976/293/ 19.67 H	LAT= 45.3	17 - 1976/294/ 9.17 H	LAT= 66.1
8 - 1976/293/ 20.83 H	LAT= 32.1		
9 - 1976/293/ 21.67 H	LAT= 12.5		
10 - 1976/293/ 22.17 H	LAT= -12.6		

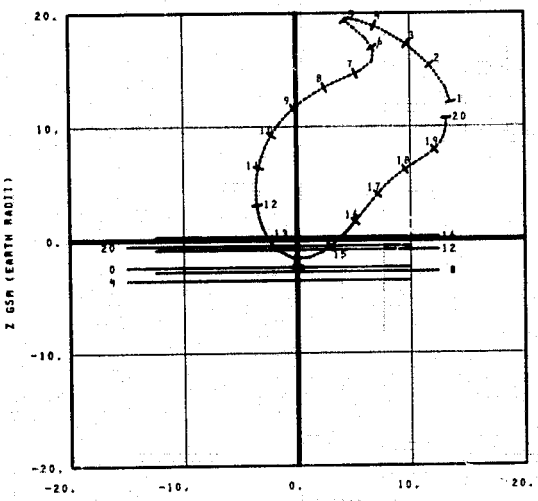
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/292/11.00H TO 1976/294/12.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/292/ 11.33 H	R= 10.3 R_E	11 - 1976/293/ 19.50 H	R= 7.5 R_E
2 - 1976/292/ 14.83 H	R= 19.9 R_E	12 - 1976/ 73/ 21.00 H	R= 4.9 R_E
3 - 1976/292/ 16.83 H	R= 19.9 R_E	13 - 1976/293/ 22.00 H	R= 2.6 R_E
4 - 1976/292/ 19.33 H	R= 20.3 R_E	14 - 1976/293/ 22.83 H	R= 1.6 R_E
5 - 1976/293/ 0.83 H	R= 20.0 R_E	15 - 1976/293/ 23.67 H	R= 3.1 R_E
6 - 1976/293/ 6.33 H	R= 18.5 R_E	16 - 1976/294/ 0.83 H	R= 5.5 R_E
7 - 1976/293/ 11.33 H	R= 15.9 R_E	17 - 1976/294/ 2.50 H	R= 8.2 R_E
8 - 1976/293/ 13.83 H	R= 14.0 R_E	18 - 1976/294/ 5.00 H	R= 11.4 R_E
9 - 1976/293/ 16.00 H	R= 12.0 R_E	19 - 1976/294/ 8.33 H	R= 14.5 R_E
10 - 1976/293/ 17.83 H	R= 9.9 R_E	20 - 1976/294/ 12.00 H	R= 17.0 R_E

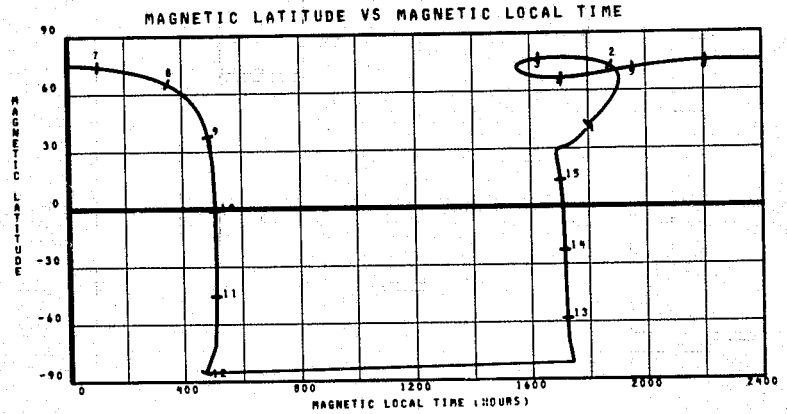
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/292/11.00H TO 1976/294/12.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

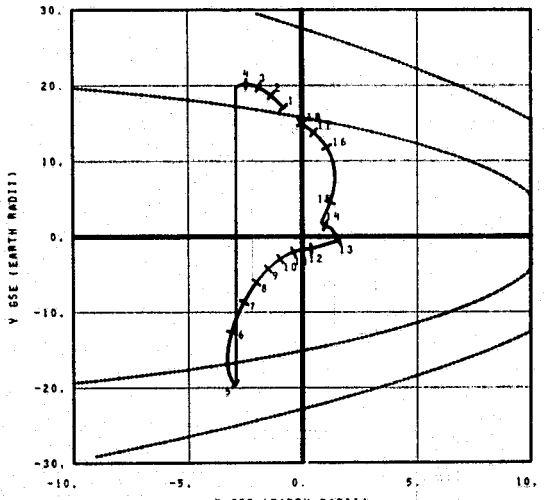
1 - 1976/292/ 11.33 H	R= 10.3 R_E	8 - 1976/293/ 18.67 H	R= 8.0 R_E	15 - 1976/294/ 0.83 H	R= 5.5 R_E
2 - 1976/292/ 14.83 H	R= 20.3 R_E	9 - 1976/293/ 21.17 H	R= 4.6 R_E		
3 - 1976/292/ 23.83 H	R= 20.2 R_E	10 - 1976/293/ 22.17 H	R= 2.9 R_E		
4 - 1976/293/ 7.83 H	R= 17.9 R_E	11 - 1976/293/ 22.50 H	R= 1.7 R_E		
5 - 1976/293/ 12.17 H	R= 15.3 R_E	12 - 1976/293/ 22.83 H	R= 1.6 R_E		
6 - 1976/293/ 14.50 H	R= 13.0 R_E	13 - 1976/293/ 23.00 H	R= 1.9 R_E		
7 - 1976/293/ 16.50 H	R= 11.0 R_E	14 - 1976/293/ 23.50 H	R= 2.7 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/292 /11.00H TO1976/294 /12.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/299/ 12.17 H	LAT= 70.8	11 - 1976/296/ 1.58 H	LAT= -30.9		
2 - 1976/299/ 15.67 H	LAT= 75.6	12 - 1976/296/ 1.92 H	LAT= -79.1		
3 - 1976/299/ 19.67 H	LAT= 78.7	13 - 1976/296/ 2.08 H	LAT= -81.0		
4 - 1976/295/ 0.17 H	LAT= 81.3	14 - 1976/296/ 2.17 H	LAT= -62.2		
5 - 1976/295/ 5.67 H	LAT= 81.3	15 - 1976/296/ 3.63 H	LAT= 21.6		
6 - 1976/295/ 10.17 H	LAT= 65.8	16 - 1976/296/ 8.67 H	LAT= 57.9		
7 - 1976/295/ 21.67 H	LAT= 53.4	17 - 1976/296/ 10.67 H	LAT= 62.6		
8 - 1976/295/ 23.92 H	LAT= 40.3	18 - 1976/296/ 12.17 H	LAT= 65.7		
9 - 1976/296/ 0.92 H	LAT= 25.2				
10 - 1976/296/ 1.08 H	LAT= 9.9				

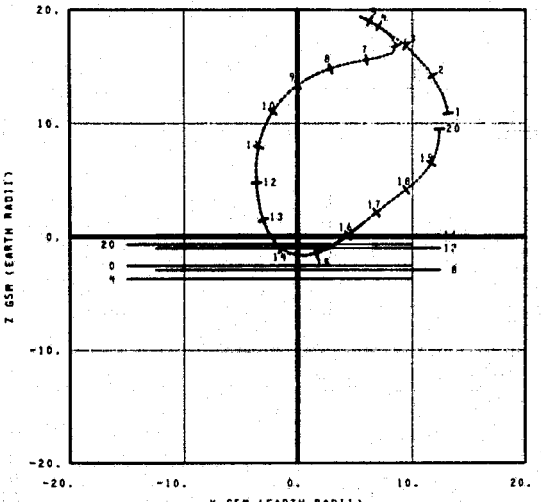
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/299/12.00H TO 1976/296/13.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/299/ 12.17 H	R= 17.1 R_E	11 - 1976/295/ 21.67 H	R= 9.0 R_E
2 - 1976/299/ 15.17 H	R= 18.5 R_E	12 - 1976/295/ 23.92 H	R= 4.9 R_E
3 - 1976/299/ 17.67 H	R= 19.9 R_E	13 - 1976/296/ 0.83 H	R= 3.6 R_E
4 - 1976/299/ 20.17 H	R= 20.0 R_E	14 - 1976/296/ 1.75 H	R= 1.8 R_E
5 - 1976/295/ 2.67 H	R= 20.2 R_E	15 - 1976/296/ 2.50 H	R= 2.3 R_E
6 - 1976/295/ 7.67 H	R= 19.2 R_E	16 - 1976/296/ 3.53 H	R= 4.5 R_E
7 - 1976/295/ 12.67 H	R= 17.1 R_E	17 - 1976/296/ 5.08 H	R= 7.3 R_E
8 - 1976/295/ 15.17 H	R= 15.5 R_E	18 - 1976/296/ 7.33 H	R= 10.4 R_E
9 - 1976/295/ 17.33 H	R= 13.8 R_E	19 - 1976/296/ 10.17 H	R= 13.3 R_E
10 - 1976/295/ 19.50 H	R= 11.7 R_E	20 - 1976/296/ 13.00 H	R= 15.6 R_E

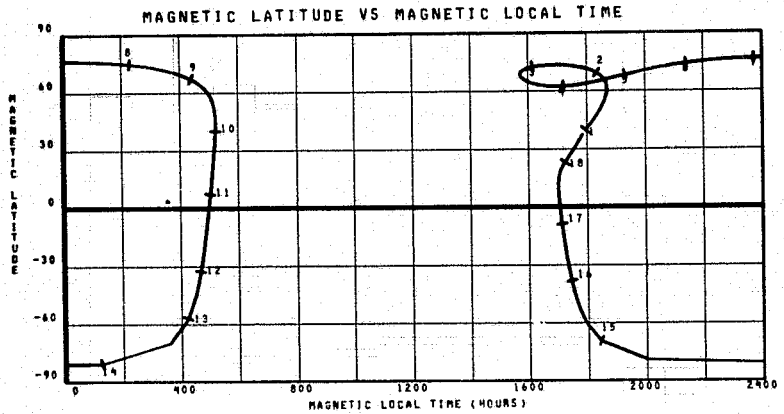
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/299/12.00H TO 1976/296/13.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

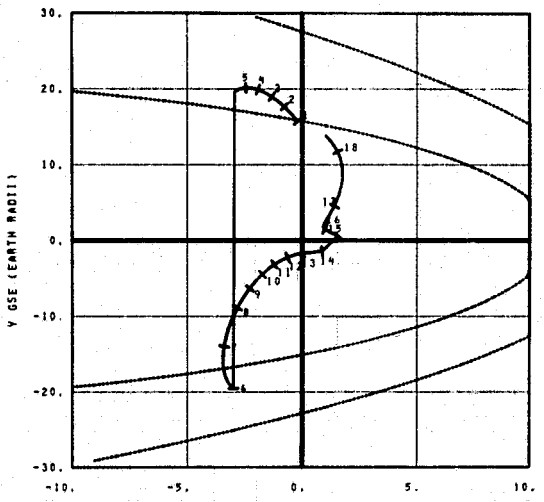
1 - 1976/299/ 12.17 H	R= 17.1 R_E	8 - 1976/295/ 19.00 H	R= 12.2 R_E	15 - 1976/296/ 2.25 H	R= 1.8 R_E
2 - 1976/299/ 20.17 H	R= 20.0 R_E	9 - 1976/295/ 21.33 H	R= 9.5 R_E	16 - 1976/296/ 3.58 H	R= 2.9 R_E
3 - 1976/295/ 0.17 H	R= 20.3 R_E	10 - 1976/296/ 0.92 H	R= 4.5 R_E	17 - 1976/296/ 5.28 H	R= 4.0 R_E
4 - 1976/295/ 5.17 H	R= 19.1 R_E	11 - 1976/296/ 1.33 H	R= 2.6 R_E	18 - 1976/296/ 8.17 H	R= 11.3 R_E
5 - 1976/295/ 12.67 H	R= 17.1 R_E	12 - 1976/296/ 1.75 H	R= 1.8 R_E		
6 - 1976/295/ 15.33 H	R= 15.4 R_E	13 - 1976/296/ 1.92 H	R= 1.6 R_E		
7 - 1976/295/ 17.17 H	R= 13.9 R_E	14 - 1976/296/ 2.08 H	R= 1.7 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/299 /12.00H TO1976/296 /13.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/296/ 13.17H	LAT= 67.4	11 - 1976/298/ 9.17H	LAT= 9.6
2 - 1976/296/ 16.50H	LAT= 72.2	12 - 1976/298/ 9.67H	LAT= -18.9
3 - 1976/296/ 19.83H	LAT= 76.0	13 - 1976/298/ 5.00H	LAT= -68.3
4 - 1976/296/ 23.83H	LAT= 79.4	14 - 1976/298/ 5.17H	LAT= -79.5
5 - 1976/297/ 3.83H	LAT= 81.5	15 - 1976/298/ 5.25H	LAT= -79.1
6 - 1976/297/ 8.83H	LAT= 81.3	16 - 1976/298/ 5.42H	LAT= -56.4
7 - 1976/297/ 19.83H	LAT= 69.2	17 - 1976/298/ 6.08H	LAT= 22.3
8 - 1976/298/ 0.67H	LAT= 54.4	18 - 1976/298/ 11.83H	LAT= 57.2
9 - 1976/298/ 2.92H	LAT= 42.4		
10 - 1976/298/ 3.50H	LAT= 27.7		

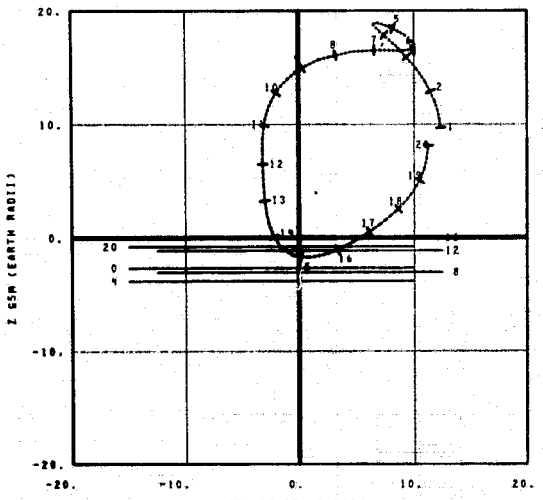
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/296/13.00H TO 1976/298/14.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/296/ 13.17H	R= 15.7R_E	11 - 1976/297/ 23.50H	R= 10.0R_E
2 - 1976/296/ 16.50H	R= 17.3R_E	12 - 1976/298/ 1.83H	R= 7.7R_E
3 - 1976/296/ 19.83H	R= 18.5R_E	13 - 1976/298/ 3.50H	R= 4.0R_E
4 - 1976/296/ 23.83H	R= 19.4R_E	14 - 1976/298/ 4.67H	R= 2.3R_E
5 - 1976/297/ 3.83H	R= 20.3R_E	15 - 1976/298/ 5.42H	R= 1.0R_E
6 - 1976/297/ 8.83H	R= 19.9R_E	16 - 1976/298/ 6.33H	R= 3.4R_E
7 - 1976/297/ 13.83H	R= 18.1R_E	17 - 1976/298/ 7.67H	R= 6.2R_E
8 - 1976/297/ 16.33H	R= 16.8R_E	18 - 1976/298/ 9.50H	R= 9.0R_E
9 - 1976/297/ 18.50H	R= 15.4R_E	19 - 1976/298/ 11.67H	R= 11.7R_E
10 - 1976/297/ 21.00H	R= 13.4R_E	20 - 1976/298/ 14.00H	R= 13.9R_E

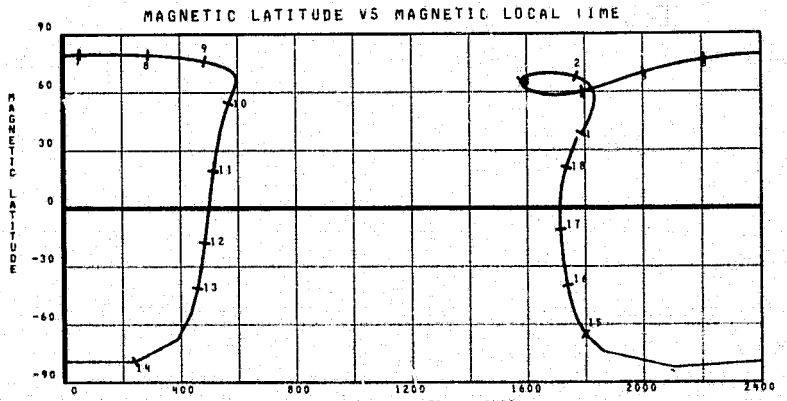
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/296/13.00H TO 1976/298/14.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

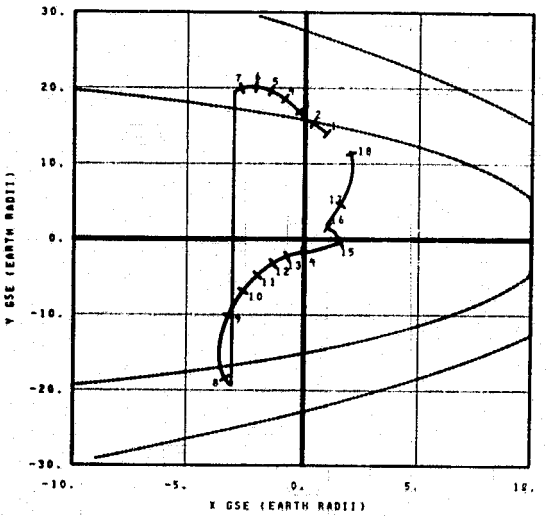
1 - 1976/296/ 13.17H	R= 15.7R_E	8 - 1976/297/ 20.67H	R= 13.7R_E
2 - 1976/296/ 20.83H	R= 19.4R_E	9 - 1976/297/ 22.50H	R= 11.9R_E
3 - 1976/297/ 1.83H	R= 20.3R_E	10 - 1976/298/ 3.25H	R= 5.2R_E
4 - 1976/297/ 10.33H	R= 19.4R_E	11 - 1976/298/ 4.50H	R= 2.6R_E
5 - 1976/297/ 14.83H	R= 17.6R_E	12 - 1976/298/ 4.92H	R= 1.9R_E
6 - 1976/297/ 17.33H	R= 16.2R_E	13 - 1976/298/ 5.08H	R= 1.7R_E
7 - 1976/297/ 19.17H	R= 14.9R_E	14 - 1976/298/ 5.33H	R= 1.7R_E
		15 - 1976/298/ 5.58H	R= 2.1R_E
		16 - 1976/298/ 5.92H	R= 2.7R_E
		17 - 1976/298/ 6.88H	R= 4.4R_E
		18 - 1976/298/ 10.83H	R= 10.7R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/296 /13.00H TO1976/298 /14 00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/298/ 14.17H	LAT= 63.2	11 - 1976/300/ 6.50H	LAT= 31.4		
2 - 1976/298/ 15.83H	LAT= 64.4	12 - 1976/300/ 7.33H	LAT= 10.9		
3 - 1976/298/ 18.17H	LAT= 70.1	13 - 1976/300/ 7.83H	LAT= -16.1		
4 - 1976/298/ 21.67H	LAT= 74.5	14 - 1976/300/ 8.25H	LAT= -63.0		
5 - 1976/299/ 1.17H	LAT= 77.9	15 - 1976/300/ 8.42H	LAT= -81.0		
6 - 1976/299/ 5.17H	LAT= 80.7	16 - 1976/300/ 8.67H	LAT= -50.4		
7 - 1976/299/ 9.67H	LAT= 81.8	17 - 1976/300/ 10.13H	LAT= 23.1		
8 - 1976/299/ 15.67H	LAT= 79.1	18 - 1976/300/ 14.75H	LAT= 56.2		
9 - 1976/300/ 2.03H	LAT= 58.9				
10 - 1976/300/ 5.25H	LAT= 45.7				

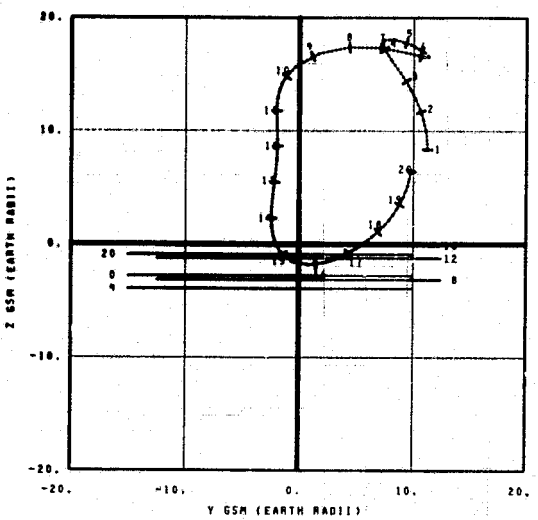
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/298/14.00H TO 1976/300/15.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/298/ 14.17H	R= 14.0R_E	11 - 1976/300/ 1.17H	R= 12.4R_E
2 - 1976/298/ 16.50H	R= 15.8R_E	12 - 1976/300/ 3.83H	R= 9.4R_E
3 - 1976/298/ 18.67H	R= 17.1R_E	13 - 1976/300/ 5.83H	R= 6.4R_E
4 - 1976/298/ 22.17H	R= 18.6R_E	14 - 1976/300/ 7.25H	R= 3.6R_E
5 - 1976/299/ 4.17H	R= 20.2R_E	15 - 1976/300/ 8.25H	R= 1.7R_E
6 - 1976/299/ 11.17H	R= 19.9R_E	16 - 1976/300/ 9.00H	R= 2.9R_E
7 - 1976/299/ 14.67H	R= 19.0R_E	17 - 1976/300/ 9.97H	R= 4.9R_E
8 - 1976/299/ 16.67H	R= 18.2R_E	18 - 1976/300/ 11.42H	R= 7.1R_E
9 - 1976/299/ 19.17H	R= 17.0R_E	19 - 1976/300/ 13.00H	R= 9.5R_E
10 - 1976/299/ 21.83H	R= 15.3R_E	20 - 1976/300/ 15.00H	R= 11.0R_E

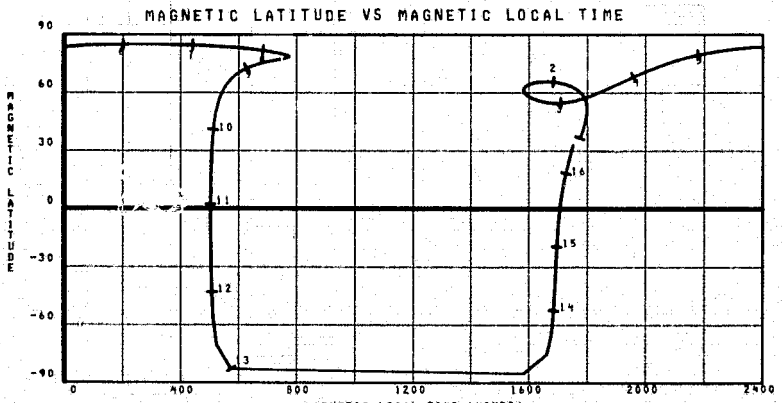
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/298/14.00H TO 1976/300/15.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

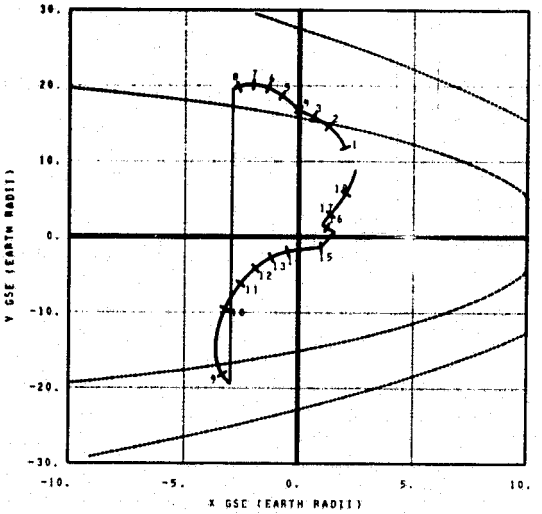
1 - 1976/298/ 14.17H	R= 14.0R_E	8 - 1976/299/ 24.00H	R= 13.5R_E	15 - 1976/300/ 9.75H	R= 9.1R_E
2 - 1976/298/ 22.17H	R= 18.6R_E	9 - 1976/300/ 5.50H	R= 6.9R_E	16 - 1976/300/ 12.75H	R= 9.1R_E
3 - 1976/299/ 8.17H	R= 20.3R_E	10 - 1976/300/ 7.92H	R= 3.3R_E		
4 - 1976/299/ 15.17H	R= 18.8R_E	11 - 1976/300/ 8.00H	R= 2.0R_E		
5 - 1976/299/ 18.67H	R= 17.3R_E	12 - 1976/300/ 8.33H	R= 1.7R_E		
6 - 1976/299/ 21.17H	R= 15.8R_E	13 - 1976/300/ 8.58H	R= 1.7R_E		
7 - 1976/299/ 22.17H	R= 15.0R_E	14 - 1976/300/ 9.00H	R= 2.5R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/298 /14.00H TO19T6/300 /15.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/300/ 15.17H	LAT=	57.5	11 - 1976/302/ 0.83H	LAT=	42.4
2 - 1976/300/ 18.17H	LAT=	64.7	12 - 1976/302/ 10.00H	LAT=	25.9
3 - 1976/300/ 19.83H	LAT=	67.7	13 - 1976/302/ 10.75H	LAT=	1.8
4 - 1976/300/ 21.33H	LAT=	70.0	14 - 1976/302/ 11.25H	LAT=	-36.3
5 - 1976/301/ 1.33H	LAT=	74.9	15 - 1976/302/ 11.50H	LAT=	-88.6
6 - 1976/301/ 9.83H	LAT=	78.2	16 - 1976/302/ 11.75H	LAT=	-66.6
7 - 1976/301/ 8.83H	LAT=	80.9	17 - 1976/302/ 12.50H	LAT=	2.4
8 - 1976/301/ 13.33H	LAT=	81.0	18 - 1976/302/ 14.00H	LAT=	32.8
9 - 1976/301/ 19.33H	LAT=	78.7			
10 - 1976/302/ 6.50H	LAT=	57.1			

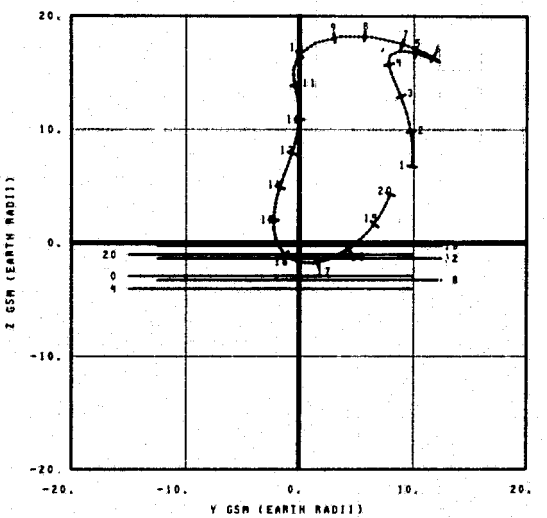
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/300/15.00H TO 1976/302/16.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/300/ 15.17H	R= 12.0R_E	11 - 1976/302/ 2.17H	R= 14.4R_E
2 - 1976/300/ 17.17H	R= 13.9R_E	12 - 1976/302/ 5.33H	R= 11.4R_E
3 - 1976/300/ 19.50H	R= 15.7R_E	13 - 1976/302/ 7.67H	R= 6.5R_E
4 - 1976/300/ 22.67H	R= 17.6R_E	14 - 1976/302/ 9.92H	R= 5.7R_E
5 - 1976/301/ 4.33H	R= 19.7R_E	15 - 1976/302/ 10.50H	R= 3.3R_E
6 - 1976/301/ 11.33H	R= 20.3R_E	16 - 1976/302/ 11.50H	R= 1.7R_E
7 - 1976/301/ 14.33H	R= 19.9R_E	17 - 1976/302/ 12.25H	R= 2.6R_E
8 - 1976/301/ 16.83H	R= 19.3R_E	18 - 1976/302/ 13.16H	R= 4.6R_E
9 - 1976/301/ 18.83H	R= 18.7R_E	19 - 1976/302/ 14.50H	R= 6.9R_E
10 - 1976/301/ 22.33H	R= 17.0R_E	20 - 1976/302/ 16.00H	R= 9.2R_E

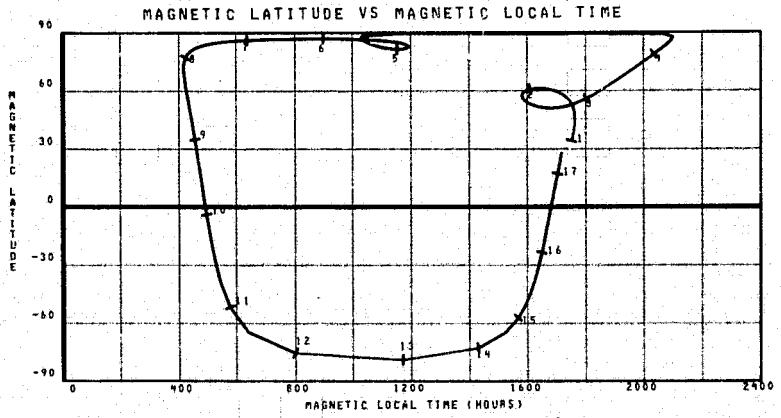
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/300/15.00H TO 1976/302/16.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

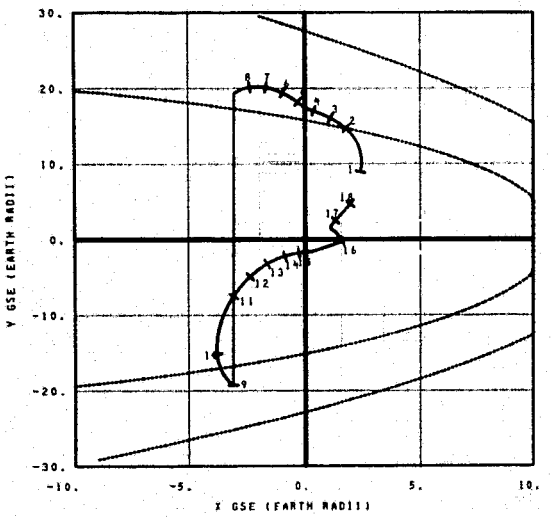
1 - 1976/300/ 15.17H	R= 12.0R_E	8 - 1976/302/ 0.83H	R= 6.7R_E	15 - 1976/302/ 12.00H	R= 2.2R_E
2 - 1976/300/ 23.83H	R= 19.1R_E	9 - 1976/302/ 10.75H	R= 3.0R_E	16 - 1976/302/ 12.67H	R= 3.5R_E
3 - 1976/301/ 11.83H	R= 20.2R_E	10 - 1976/302/ 11.25H	R= 2.0R_E	17 - 1976/302/ 14.83H	R= 7.5R_E
4 - 1976/301/ 18.83H	R= 18.7R_E	11 - 1976/302/ 11.58H	R= 1.6R_E		
5 - 1976/302/ 3.17H	R= 13.6R_E	12 - 1976/302/ 11.75H	R= 1.7R_E		
6 - 1976/302/ 7.00H	R= 9.4R_E	13 - 1976/302/ 11.83H	R= 1.8R_E		
7 - 1976/302/ 7.50H	R= 8.7R_E	14 - 1976/302/ 11.92H	R= 1.9R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/300 /15.00H TO1976/302 /16.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/302/ 16.00H	LAT= 70.6	11 - 1976/304/ 11.17H	LAT= 49.5
2 - 1976/302/ 21.50H	LAT= 64.9	12 - 1976/304/ 12.75H	LAT= 39.6
3 - 1976/303/ 23.33H	LAT= 68.1	13 - 1976/304/ 13.67H	LAT= 19.6
4 - 1976/303/ 0.83H	LAT= 71.3	14 - 1976/304/ 14.25H	LAT= -16.8
5 - 1976/303/ 3.17H	LAT= 73.3	15 - 1976/304/ 14.58H	LAT= -52.5
6 - 1976/303/ 6.67H	LAT= 77.0	16 - 1976/304/ 14.83H	LAT= -81.9
7 - 1976/303/ 10.67H	LAT= 80.1	17 - 1976/304/ 15.58H	LAT= -7.2
8 - 1976/303/ 14.67H	LAT= 81.7	18 - 1976/304/ 16.67H	LAT= 29.2
9 - 1976/303/ 19.67H	LAT= 80.8		
10 - 1976/304/ 3.83H	LAT= 72.3		

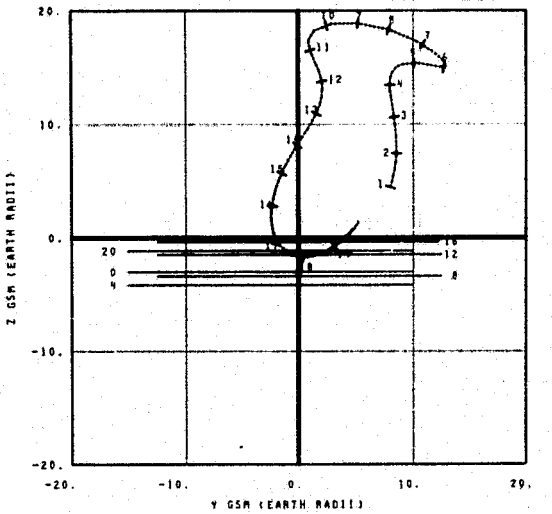
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/302/16.00H TO 1976/304/17.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/302/ 16.00H	R= 9.3R_E	11 - 1976/304/ 1.67H	R= 17.0R_E
2 - 1976/302/ 17.83H	R= 11.9R_E	12 - 1976/304/ 5.33H	R= 14.9R_E
3 - 1976/302/ 20.00H	R= 13.5R_E	13 - 1976/304/ 8.33H	R= 11.6R_E
4 - 1976/302/ 22.67H	R= 15.7R_E	14 - 1976/304/ 10.67H	R= 8.0R_E
5 - 1976/303/ 3.67H	R= 18.9R_E	15 - 1976/304/ 12.17H	R= 6.5R_E
6 - 1976/303/ 7.67H	R= 19.7R_E	16 - 1976/304/ 13.42H	R= 4.1R_E
7 - 1976/303/ 13.67H	R= 20.3R_E	17 - 1976/304/ 14.42H	R= 2.0R_E
8 - 1976/303/ 16.17H	R= 20.1R_E	18 - 1976/304/ 15.08H	R= 1.9R_E
9 - 1976/303/ 18.17H	R= 19.0R_E	19 - 1976/304/ 15.90H	R= 3.5R_E
10 - 1976/303/ 20.67H	R= 19.1R_E		

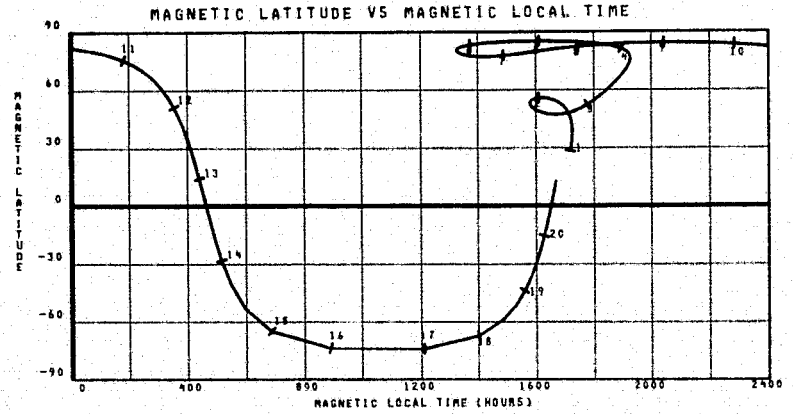
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/302/16.00H TO 1976/304/17.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

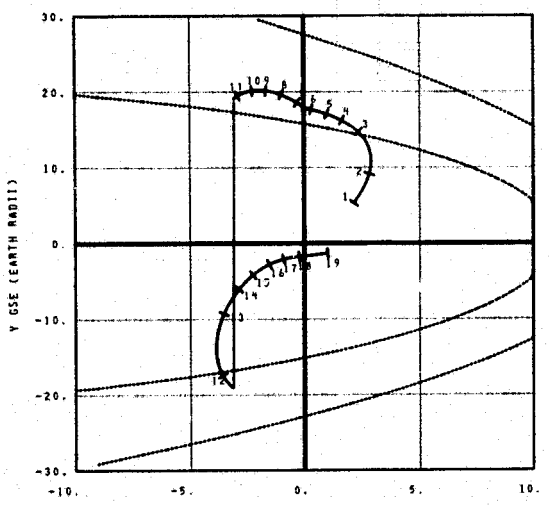
1 - 1976/302/ 16.00H	R= 9.3R_E	8 - 1976/304/ 8.33H	R= 11.6R_E	15 - 1976/304/ 14.83H	R= 1.6R_E
2 - 1976/302/ 23.50H	R= 16.2R_E	9 - 1976/304/ 9.50H	R= 10.3R_E	16 - 1976/304/ 14.92H	R= 1.7R_E
3 - 1976/303/ 11.67H	R= 20.3R_E	10 - 1976/304/ 10.17H	R= 9.5R_E	17 - 1976/304/ 15.08H	R= 1.8R_E
4 - 1976/303/ 20.17H	R= 19.3R_E	11 - 1976/304/ 11.50H	R= 7.6R_E	18 - 1976/304/ 15.08H	R= 1.9R_E
5 - 1976/303/ 22.17H	R= 18.6R_E	12 - 1976/304/ 13.25H	R= 4.3R_E	19 - 1976/304/ 15.33H	R= 2.3R_E
6 - 1976/303/ 23.67H	R= 18.0R_E	13 - 1976/304/ 14.17H	R= 2.5R_E	20 - 1976/304/ 15.83H	R= 3.4R_E
7 - 1976/304/ 5.67H	R= 14.2R_E	14 - 1976/304/ 14.58H	R= 1.6R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/302 /16.00H TO19T6/304 /17.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/304/ 17.00 H	LAT= 30.2	11 - 1976/305/ 21.83 H	LAT= 81.4		
2 - 1976/304/ 19.50 H	LAT= 49.6	12 - 1976/306/ 3.33 H	LAT= 77.3		
3 - 1976/305/ 0.83 H	LAT= 65.1	13 - 1976/306/ 13.00 H	LAT= 56.9		
4 - 1976/305/ 2.83 H	LAT= 68.5	14 - 1976/306/ 15.25 H	LAT= 42.5		
5 - 1976/305/ 4.17 H	LAT= 70.4	15 - 1976/306/ 16.33 H	LAT= 27.6		
6 - 1976/305/ 5.33 H	LAT= 72.0	16 - 1976/306/ 17.00 H	LAT= 5.5		
7 - 1976/305/ 7.33 H	LAT= 74.3	17 - 1976/306/ 17.50 H	LAT= -26.4		
8 - 1976/305/ 10.83 H	LAT= 77.7	18 - 1976/306/ 17.83 H	LAT= -58.0		
9 - 1976/305/ 14.33 H	LAT= 80.3	19 - 1976/306/ 18.00 H	LAT= -81.1		
10 - 1976/305/ 17.83 H	LAT= 81.7				

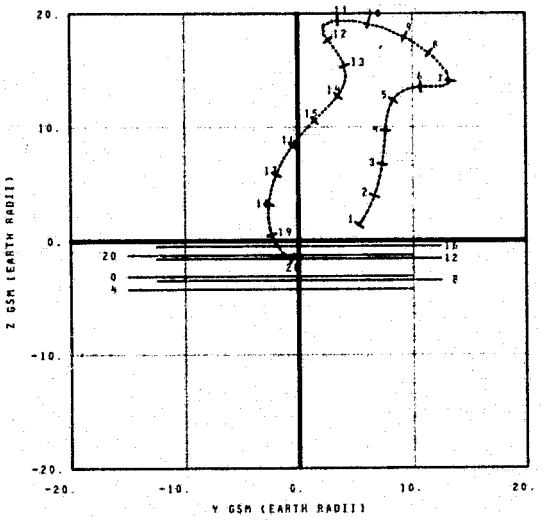
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/304/17.00H TO 1976/306/18.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/304/ 17.00 H	R= 5.7 R_E	11 - 1976/305/ 20.83 H	R= 19.9 R_E
2 - 1976/304/ 18.33 H	R= 7.9 R_E	12 - 1976/306/ 2.33 H	R= 18.2 R_E
3 - 1976/304/ 19.92 H	R= 10.1 R_E	13 - 1976/306/ 5.83 H	R= 16.4 R_E
4 - 1976/304/ 22.00 H	R= 12.9 R_E	14 - 1976/306/ 9.33 H	R= 13.0 R_E
5 - 1976/305/ 0.83 H	R= 14.9 R_E	15 - 1976/306/ 11.83 H	R= 11.3 R_E
6 - 1976/305/ 4.50 H	R= 17.3 R_E	16 - 1976/306/ 13.67 H	R= 9.1 R_E
7 - 1976/305/ 9.83 H	R= 19.9 R_E	17 - 1976/306/ 15.17 H	R= 6.8 R_E
8 - 1976/305/ 13.83 H	R= 20.2 R_E	18 - 1976/306/ 16.33 H	R= 4.7 R_E
9 - 1976/305/ 15.83 H	R= 20.3 R_E	19 - 1976/306/ 17.25 H	R= 2.8 R_E
10 - 1976/305/ 18.33 H	R= 20.2 R_E	20 - 1976/306/ 18.00 H	R= 1.6 R_E

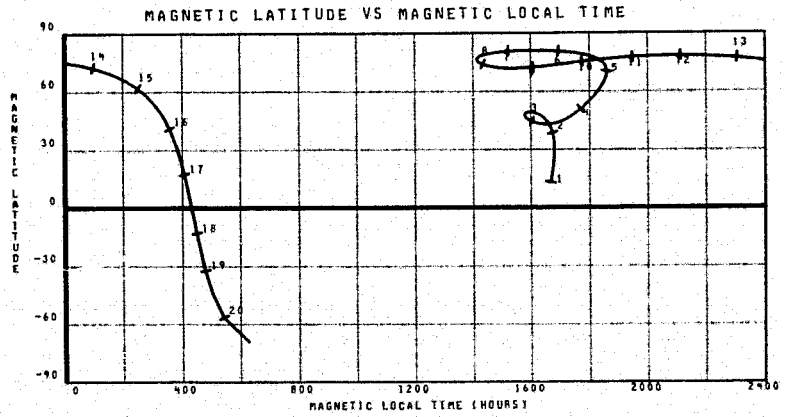
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/304/17.00H TO 1976/306/18.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

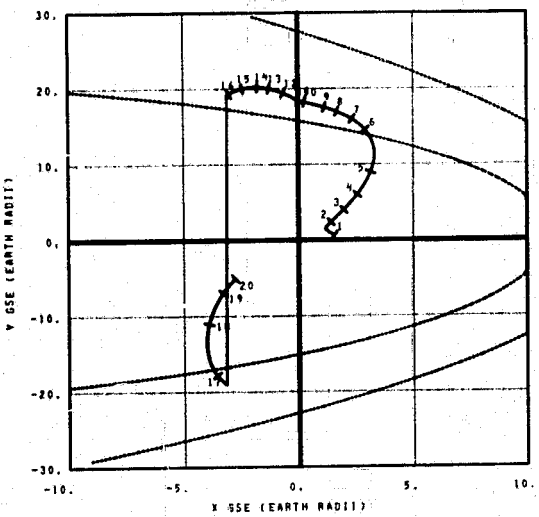
1 - 1976/304/ 17.00 H	R= 5.7 R_E	8 - 1976/306/ 2.83 H	R= 18.0 R_E	15 - 1976/306/ 15.17 H	R= 6.8 R_E
2 - 1976/304/ 19.67 H	R= 9.8 R_E	9 - 1976/306/ 6.83 H	R= 15.7 R_E	16 - 1976/306/ 16.50 H	R= 4.9 R_E
3 - 1976/305/ 4.50 H	R= 17.3 R_E	10 - 1976/306/ 9.17 H	R= 13.9 R_E	17 - 1976/306/ 17.17 H	R= 3.0 R_E
4 - 1976/305/ 12.33 H	R= 20.0 R_E	11 - 1976/306/ 10.67 H	R= 12.5 R_E	18 - 1976/306/ 17.58 H	R= 2.1 R_E
5 - 1976/305/ 17.83 H	R= 20.3 R_E	12 - 1976/306/ 11.67 H	R= 11.5 R_E	19 - 1976/306/ 17.75 H	R= 1.8 R_E
6 - 1976/305/ 21.33 H	R= 19.8 R_E	13 - 1976/306/ 12.67 H	R= 10.3 R_E	20 - 1976/306/ 17.92 H	R= 1.7 R_E
7 - 1976/305/ 22.83 H	R= 19.5 R_E	14 - 1976/306/ 13.83 H	R= 8.8 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/304 /17.00H TO1976/306 /18.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/306/ 18.00H	LAT= -77.1	11 - 1976/307/ 10.17H	LAT=	73.9
2 - 1976/306/ 18.75H	LAT= -9.3	12 - 1976/307/ 13.17H	LAT=	74.9
3 - 1976/306/ 19.95H	LAT= 18.9	13 - 1976/307/ 16.17H	LAT=	75.9
4 - 1976/306/ 20.67H	LAT= 35.5	14 - 1976/307/ 18.67H	LAT=	88.9
5 - 1976/306/ 22.67H	LAT= 49.9	15 - 1976/307/ 22.17H	LAT=	81.8
6 - 1976/307/ 0.00H	LAT= 64.9	16 - 1976/308/ 1.67H	LAT=	81.1
7 - 1976/307/ 5.83H	LAT= 68.1	17 - 1976/308/ 5.67H	LAT=	70.2
8 - 1976/307/ 7.33H	LAT= 78.3	18 - 1976/308/ 14.67H	LAT=	62.6
9 - 1976/307/ 8.33H	LAT= 71.7	19 - 1976/308/ 17.83H	LAT=	47.8
10 - 1976/307/ 9.67H	LAT= 73.3	20 - 1976/308/ 19.00H	LAT=	36.3

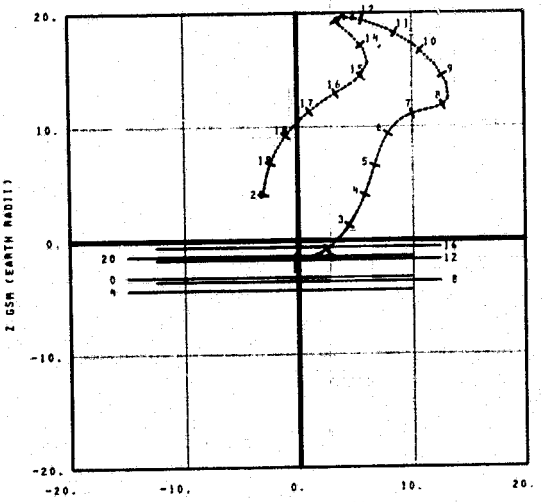
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/306/18.00H TO 1976/308/19.00H

HAWKEYE-1

PROJECTED ONTO THE GSM X-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/306/ 18.00H	R= 1.7RE	11 - 1976/307/ 17.17H	R= 20.2RE
2 - 1976/306/ 18.83H	R= 3.0RE	12 - 1976/307/ 19.67H	R= 20.3RE
3 - 1976/306/ 19.82H	R= 5.0RE	13 - 1976/308/ 0.67H	R= 19.8RE
4 - 1976/306/ 21.17H	R= 7.9RE	14 - 1976/308/ 5.17H	R= 18.9RE
5 - 1976/306/ 22.75H	R= 9.6RE	15 - 1976/308/ 9.67H	R= 16.8RE
6 - 1976/307/ 1.17H	R= 12.9RE	16 - 1976/308/ 12.33H	R= 14.9RE
7 - 1976/307/ 4.17H	R= 15.0RE	17 - 1976/308/ 14.33H	R= 12.1RE
8 - 1976/307/ 8.00H	R= 17.9RE	18 - 1976/308/ 16.17H	R= 10.0RE
9 - 1976/307/ 12.67H	R= 19.3RE	19 - 1976/308/ 17.67H	R= 7.9RE
10 - 1976/307/ 15.17H	R= 19.9RE	20 - 1976/308/ 19.00H	R= 5.7RE

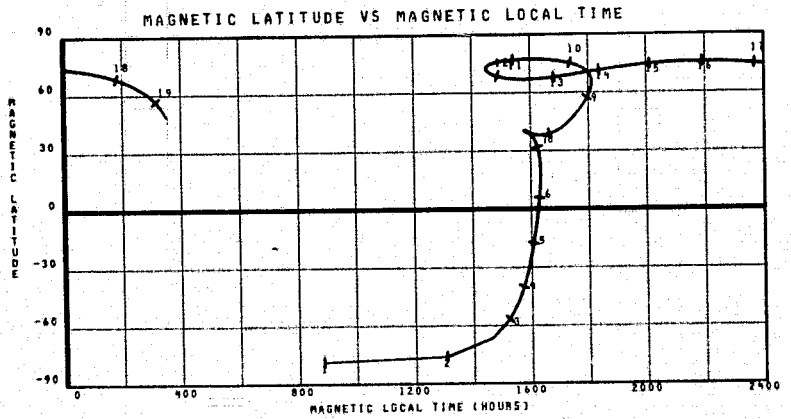
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/306/18.00H TO 1976/308/19.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

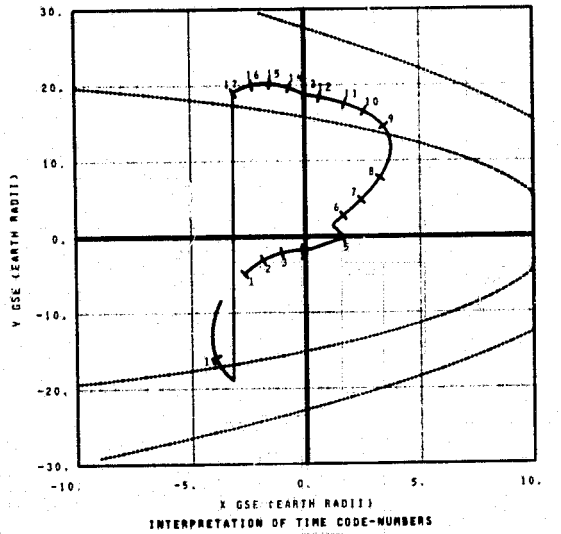
1 - 1976/306/ 18.00H	R= 1.7RE	8 - 1976/307/ 8.00H	R= 17.9RE	15 - 1976/308/ 12.50H	R= 13.0RE
2 - 1976/306/ 18.17H	R= 1.7RE	9 - 1976/307/ 15.17H	R= 19.9RE	16 - 1976/308/ 13.83H	R= 12.6RE
3 - 1976/306/ 18.33H	R= 1.9RE	10 - 1976/307/ 20.17H	R= 20.3RE	17 - 1976/308/ 15.00H	R= 11.9RE
4 - 1976/306/ 18.50H	R= 2.2RE	11 - 1976/307/ 22.67H	R= 20.1RE	18 - 1976/308/ 16.67H	R= 9.3RE
5 - 1976/306/ 18.83H	R= 3.0RE	12 - 1976/308/ 3.67H	R= 19.0RE	19 - 1976/308/ 18.33H	R= 6.9RE
6 - 1976/306/ 19.50H	R= 4.9RE	13 - 1976/308/ 8.17H	R= 16.9RE		
7 - 1976/306/ 21.50H	R= 8.0RE	14 - 1976/308/ 10.67H	R= 15.3RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/306 /18.00H TO1976/308 /19.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/308/ 19.00H	LAT= 35.2	11 - 1976/309/ 11.67H	LAT= 71.8		
2 - 1976/308/ 20.00H	LAT= 13.5	12 - 1976/309/ 13.33H	LAT= 73.8		
3 - 1976/308/ 20.67H	LAT= -17.1	13 - 1976/309/ 14.33H	LAT= 74.9		
4 - 1976/308/ 21.00H	LAT= -65.2	14 - 1976/309/ 17.33H	LAT= 77.7		
5 - 1976/308/ 21.25H	LAT= -81.0	15 - 1976/309/ 21.33H	LAT= 80.6		
6 - 1976/308/ 22.17H	LAT= 1.0	16 - 1976/310/ 1.33H	LAT= 81.8		
7 - 1976/308/ 23.25H	LAT= 27.8	17 - 1976/310/ 5.83H	LAT= 80.6		
8 - 1976/309/ 1.00H	LAT= 49.0	18 - 1976/310/ 12.33H	LAT= 74.1		
9 - 1976/309/ 7.33H	LAT= 69.1				
10 - 1976/309/ 10.00H	LAT= 69.5				

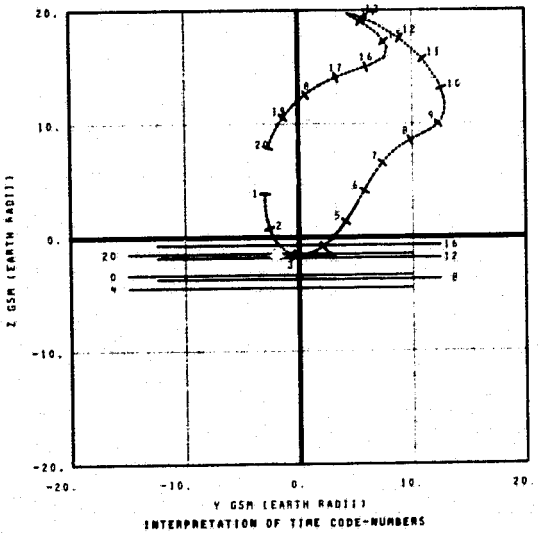
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/308/19.00H TO 1976/310/20.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/308/ 19.00H	R= 5.6RE	11 - 1976/309/ 15.33H	R= 19.1RE
2 - 1976/308/ 20.25H	R= 3.2RE	12 - 1976/309/ 17.33H	R= 19.7RE
3 - 1976/308/ 21.17H	R= 1.6RE	13 - 1976/309/ 20.33H	R= 20.2RE
4 - 1976/308/ 21.92H	R= 2.7RE	14 - 1976/310/ 2.83H	R= 20.0RE
5 - 1976/308/ 22.93H	R= 9.8RE	15 - 1976/310/ 6.33H	R= 19.1RE
6 - 1976/309/ 0.92H	R= 7.4RE	16 - 1976/310/ 11.83H	R= 16.6RE
7 - 1976/309/ 2.33H	R= 10.1RE	17 - 1976/310/ 14.17H	R= 15.1RE
8 - 1976/309/ 5.17H	R= 13.1RE	18 - 1976/310/ 16.33H	R= 13.2RE
9 - 1976/309/ 8.67H	R= 15.9RE	19 - 1976/310/ 18.17H	R= 11.4RE
10 - 1976/309/ 12.83H	R= 18.2RE	20 - 1976/310/ 20.00H	R= 9.2RE

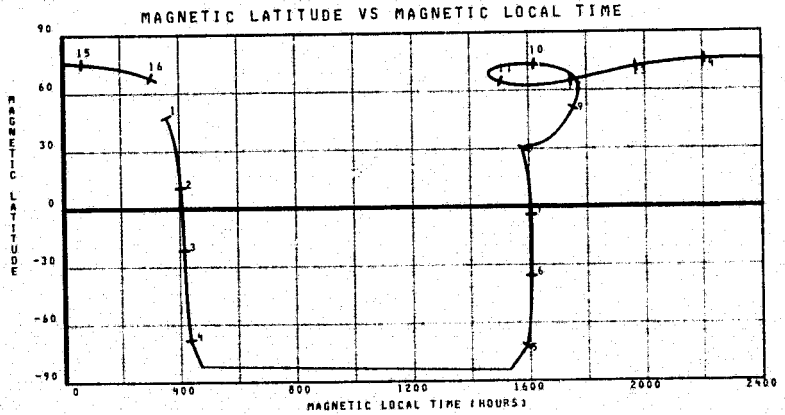
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/308/19.00H TO 1976/310/20.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

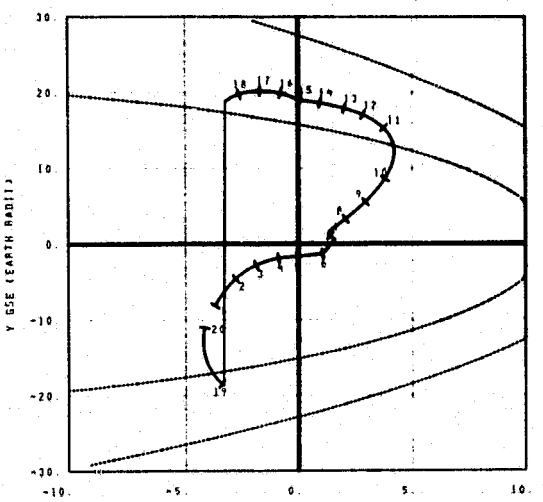
1 - 1976/308/ 19.08H	R= 5.6RE	8 - 1976/309/ 2.67H	R= 10.5RE	15 - 1976/310/ 17.33H	R= 12.3RE
2 - 1976/308/ 20.42H	R= 2.9RE	9 - 1976/309/ 14.33H	R= 18.8RE	16 - 1976/310/ 19.67H	R= 9.6RE
3 - 1976/308/ 20.83H	R= 2.0RE	10 - 1976/309/ 21.33H	R= 20.3RE		
4 - 1976/308/ 21.17H	R= 1.6RE	11 - 1976/310/ 3.83H	R= 19.8RE		
5 - 1976/308/ 21.42H	R= 1.8RE	12 - 1976/310/ 9.83H	R= 17.7RE		
6 - 1976/308/ 21.75H	R= 2.3RE	13 - 1976/310/ 13.33H	R= 15.7RE		
7 - 1976/308/ 22.37H	R= 3.7RE	14 - 1976/310/ 15.50H	R= 14.0RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/308 /19.00H TO1976/310 /20.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/310/ 20.17H	LAT= 53.4	11 - 1976/311/ 11.67H	LAT= 67.1
2 - 1976/310/ 22.92H	LAT= 33.4	12 - 1976/311/ 14.17H	LAT= 70.0
3 - 1976/310/ 23.92H	LAT= 8.9	13 - 1976/311/ 15.67H	LAT= 72.7
4 - 1976/310/ 24.00H	LAT= -28.6	14 - 1976/311/ 17.17H	LAT= 74.4
5 - 1976/311/ 0.33H	LAT= -71.7	15 - 1976/311/ 18.17H	LAT= 75.5
6 - 1976/311/ 0.92H	LAT= -81.4	16 - 1976/311/ 21.67H	LAT= 78.6
7 - 1976/311/ 0.58H	LAT= -64.9	17 - 1976/312/ 1.67H	LAT= 81.1
8 - 1976/311/ 1.67H	LAT= 11.3	18 - 1976/312/ 6.17H	LAT= 81.0
9 - 1976/311/ 2.92H	LAT= 33.7	19 - 1976/312/ 10.67H	LAT= 79.5
10 - 1976/311/ 5.00H	LAT= 48.9	20 - 1976/312/ 21.00H	LAT= 62.9

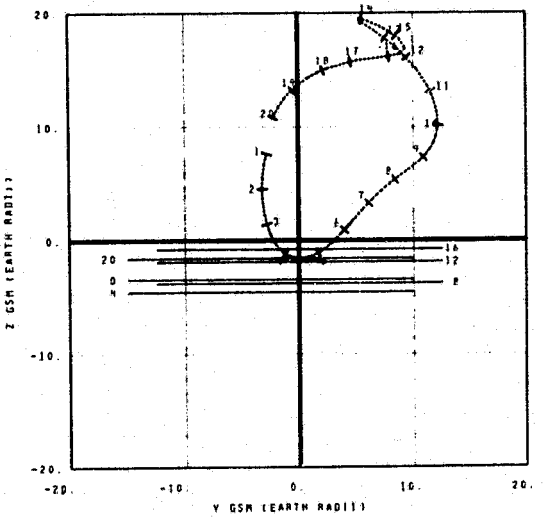
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/310/20.00H TO 1976/312/21.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/310/ 20.17H	R= 8.9RE	11 - 1976/311/ 14.50H	R= 17.5RE
2 - 1976/310/ 21.83H	R= 6.4RE	12 - 1976/311/ 17.17H	R= 18.7RE
3 - 1976/310/ 23.17H	R= 3.9RE	13 - 1976/311/ 19.17H	R= 19.3RE
4 - 1976/311/ 0.17H	R= 1.6RE	14 - 1976/312/ 1.17H	R= 20.3RE
5 - 1976/311/ 1.00H	R= 2.4RE	15 - 1976/312/ 5.67H	R= 20.0RE
6 - 1976/311/ 2.03H	R= 4.6RE	16 - 1976/312/ 11.67H	R= 18.3RE
7 - 1976/311/ 3.50H	R= 7.9RE	17 - 1976/312/ 14.67H	R= 16.0RE
8 - 1976/311/ 5.67H	R= 10.2RE	18 - 1976/312/ 16.50H	R= 15.7RE
9 - 1976/311/ 8.50H	R= 13.3RE	19 - 1976/312/ 18.83H	R= 13.9RE
10 - 1976/311/ 11.83H	R= 15.9RE	20 - 1976/312/ 21.00H	R= 11.8RE

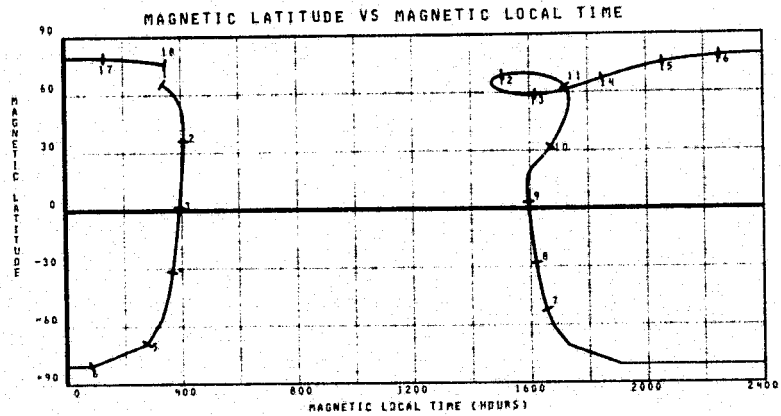
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/310/20.00H TO 1976/312/21.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

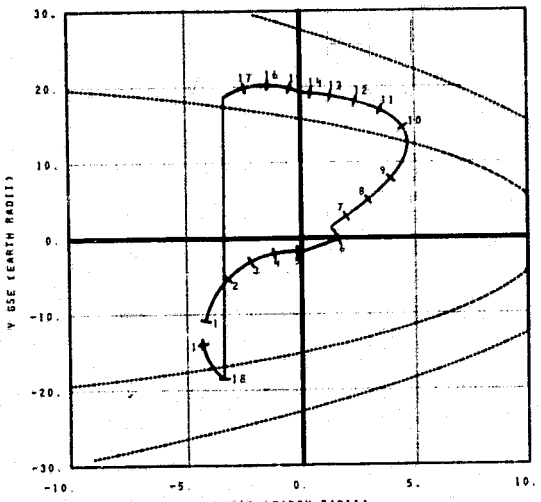
1 - 1976/310/ 20.17H	R= 8.9RE	8 - 1976/311/ 1.17H	R= 2.8RE	15 - 1976/312/ 15.67H	R= 14.2RE
2 - 1976/310/ 23.08H	R= 4.2RE	9 - 1976/311/ 2.92H	R= 5.2RE	16 - 1976/312/ 17.33H	R= 15.1RE
3 - 1976/310/ 23.83H	R= 2.4RE	10 - 1976/311/ 10.17H	R= 14.7RE	17 - 1976/312/ 19.17H	R= 13.6RE
4 - 1976/311/ 0.17H	R= 1.8RE	11 - 1976/311/ 18.17H	R= 19.0RE	18 - 1976/312/ 21.00H	R= 11.8RE
5 - 1976/311/ 0.92H	R= 1.6RE	12 - 1976/311/ 23.17H	R= 20.1RE		
6 - 1976/311/ 0.50H	R= 1.7RE	13 - 1976/312/ 7.17H	R= 19.8RE		
7 - 1976/311/ 0.83H	R= 2.1RE	14 - 1976/312/ 12.67H	R= 17.9RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/310 /20.00H TO1976/312 /21.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/312/	21.17H	LAT= 62.4	11 - 1976/313/	17.33H	LAT=	70.7
2 - 1976/313/	1.17H	LAT= 39.5	12 - 1976/313/	19.33H	LAT=	73.2
3 - 1976/313/	2.92H	LAT= 16.2	13 - 1976/313/	20.83H	LAT=	74.9
4 - 1976/313/	3.08H	LAT= -17.5	14 - 1976/313/	21.83H	LAT=	75.9
5 - 1976/313/	3.50H	LAT= -65.9	15 - 1976/314/	0.33H	LAT=	78.1
6 - 1976/313/	3.67H	LAT= -80.7	16 - 1976/314/	4.33H	LAT=	80.8
7 - 1976/313/	4.79H	LAT= 9.6	17 - 1976/314/	8.83H	LAT=	81.9
8 - 1976/313/	5.88H	LAT= 38.7	18 - 1976/314/	13.83H	LAT=	79.6
9 - 1976/313/	7.75H	LAT= 66.4	19 - 1976/314/	21.17H	LAT=	70.3
10 - 1976/313/	14.17H	LAT= 65.8				

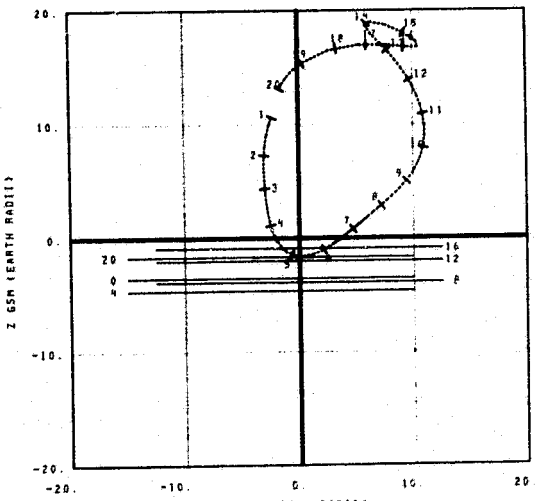
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/312/21.00H TO 1976/314/22.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/312/	21.17H	R= 11.6RE	11 - 1976/313/	14.50H	R=	15.5RE
2 - 1976/312/	23.50H	R= 8.8RE	12 - 1976/313/	16.83H	R=	17.0RE
3 - 1976/313/	1.17H	R= 6.2RE	13 - 1976/313/	19.33H	R=	18.2RE
4 - 1976/313/	2.58H	R= 3.9RE	14 - 1976/314/	0.33H	R=	19.8RE
5 - 1976/313/	3.58H	R= 1.6RE	15 - 1976/314/	5.33H	R=	20.3RE
6 - 1976/313/	4.42H	R= 2.9RE	16 - 1976/314/	11.83H	R=	19.9RE
7 - 1976/313/	5.62H	R= 5.3RE	17 - 1976/314/	14.83H	R=	18.4RE
8 - 1976/313/	7.33H	R= 8.2RE	18 - 1976/314/	16.83H	R=	17.4RE
9 - 1976/313/	9.50H	R= 11.0RE	19 - 1976/314/	19.33H	R=	15.9RE
10 - 1976/313/	12.17H	R= 13.7RE	20 - 1976/314/	22.00H	R=	13.9RE

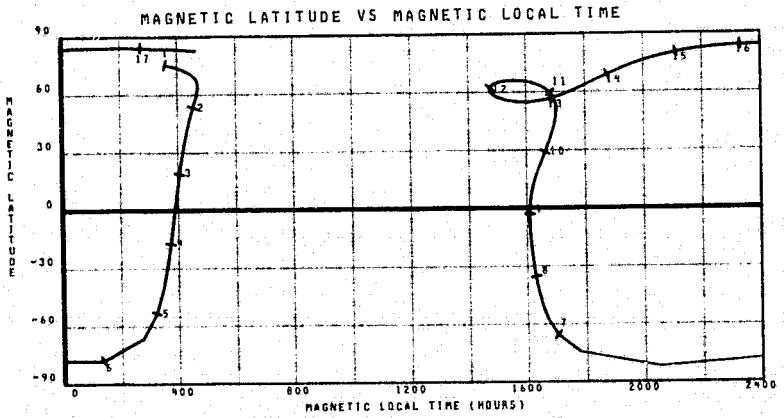
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/312/21.00H TO 1976/314/22.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

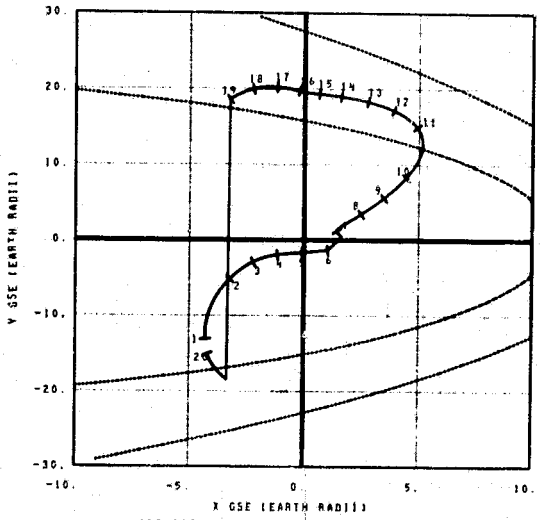
1 - 1976/312/	21.17H	R= 11.6RE	8 - 1976/313/	9.42H	R= 2.9RE	15 - 1976/314/	17.83H	R= 16.9RE
2 - 1976/313/	1.67H	R= 5.3RE	9 - 1976/313/	5.72H	R= 5.9RE	16 - 1976/314/	19.33H	R= 15.9RE
3 - 1976/313/	2.92H	R= 2.7RE	10 - 1976/313/	11.33H	R= 12.9RE	17 - 1976/314/	20.83H	R= 14.9RE
4 - 1976/313/	3.33H	R= 1.9RE	11 - 1976/313/	18.33H	R= 17.8RE			
5 - 1976/313/	3.58H	R= 1.6RE	12 - 1976/314/	0.83H	R= 19.9RE			
6 - 1976/313/	3.75H	R= 1.7RE	13 - 1976/314/	9.33H	R= 20.0RE			
7 - 1976/313/	4.00H	R= 2.0RE	14 - 1976/314/	14.33H	R= 18.6RE			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/312/21.00H TO1976/314/22.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/314/	22.17H	LAT=	68.3	11 - 1976/315/	10.00H	LAT=	66.8
2 - 1976/315/	0.42H	LAT=	39.1	12 - 1976/315/	21.17H	LAT=	71.5
3 - 1976/315/	5.67H	LAT=	14.9	13 - 1976/315/	23.17H	LAT=	73.9
4 - 1976/315/	6.33H	LAT=	-21.0	14 - 1976/316/	0.67H	LAT=	75.5
5 - 1976/315/	6.75H	LAT=	-72.1	15 - 1976/316/	1.67H	LAT=	76.4
6 - 1976/315/	6.83H	LAT=	-81.6	16 - 1976/316/	3.17H	LAT=	77.8
7 - 1976/315/	7.00H	LAT=	-53.1	17 - 1976/316/	7.17H	LAT=	80.6
8 - 1976/315/	8.25H	LAT=	15.0	18 - 1976/316/	11.67H	LAT=	81.9
9 - 1976/315/	9.50H	LAT=	35.9	19 - 1976/316/	16.67H	LAT=	80.0
10 - 1976/315/	11.42H	LAT=	56.8	20 - 1976/316/	23.00H	LAT=	72.8

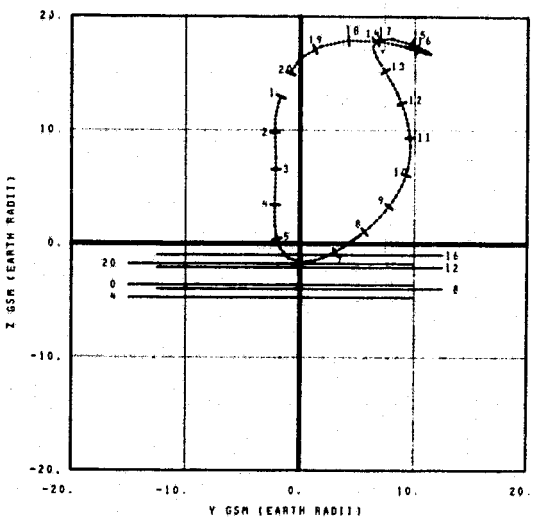
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/314/22.00H TO 1976/316/23.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/314/	22.17H	R=	13.8R_E	11 - 1976/315/	10.00H	R=	13.4R_E
2 - 1976/315/	1.00H	R=	10.9R_E	12 - 1976/315/	21.17H	R=	15.9R_E
3 - 1976/315/	3.33H	R=	7.9R_E	13 - 1976/315/	23.17H	R=	17.0R_E
4 - 1976/315/	5.00H	R=	5.0R_E	14 - 1976/316/	0.67H	R=	19.1R_E
5 - 1976/315/	6.17H	R=	2.6R_E	15 - 1976/316/	1.17H	R=	20.1R_E
6 - 1976/315/	7.00H	R=	1.0R_E	16 - 1976/316/	12.17H	R=	20.0R_E
7 - 1976/315/	8.00H	R=	3.9R_E	17 - 1976/316/	15.17H	R=	19.9R_E
8 - 1976/315/	9.42H	R=	6.4R_E	18 - 1976/316/	17.17H	R=	18.7R_E
9 - 1976/315/	11.00H	R=	9.0R_E	19 - 1976/316/	19.67H	R=	17.6R_E
10 - 1976/315/	13.00H	R=	11.4R_E	20 - 1976/316/	23.00H	R=	15.6R_E

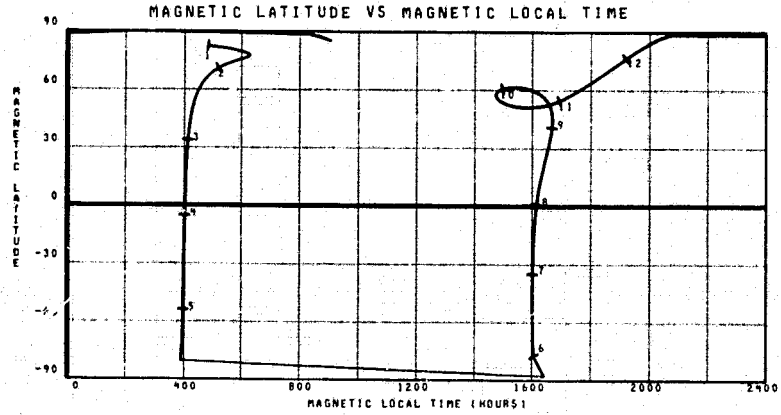
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/314/22.00H TO 1976/316/23.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

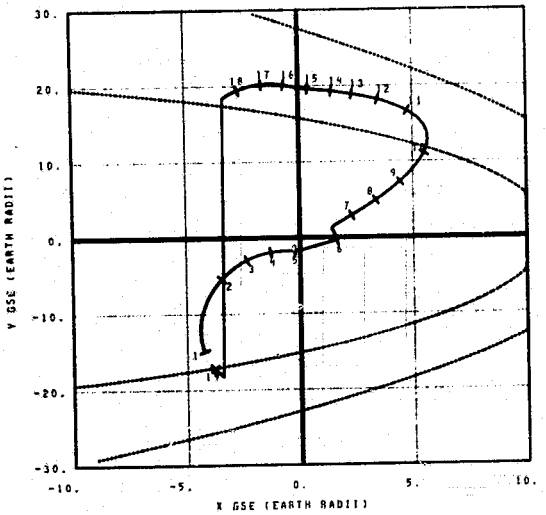
1 - 1976/314/	22.17H	R=	13.8R_E	8 - 1976/315/	9.42H	R=	6.4R_E
2 - 1976/315/	1.00H	R=	10.9R_E	9 - 1976/315/	11.17H	R=	13.5R_E
3 - 1976/315/	3.33H	R=	7.9R_E	10 - 1976/315/	23.17H	R=	18.5R_E
4 - 1976/315/	5.50H	R=	4.9R_E	11 - 1976/316/	10.17H	R=	20.3R_E
5 - 1976/315/	6.83H	R=	1.6R_E	12 - 1976/316/	17.17H	R=	18.7R_E
6 - 1976/315/	7.17H	R=	2.0R_E				
7 - 1976/315/	7.75H	R=	3.2R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/314/22.00H TO1976/316/23.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/316/ 23.17H	LAT=	72.5	11 - 1976/317/ 23.83H	LAT=	70.7
2 - 1976/317/ 7.42H	LAT=	81.5	12 - 1976/318/ 2.33H	LAT=	73.8
3 - 1976/317/ 8.83H	LAT=	16.5	13 - 1976/318/ 3.83H	LAT=	75.9
4 - 1976/317/ 9.50H	LAT=	-17.2	14 - 1976/318/ 4.83H	LAT=	76.3
5 - 1976/317/ 9.92H	LAT=	-65.8	15 - 1976/318/ 5.83H	LAT=	77.3
6 - 1976/317/ 10.08H	LAT=	-80.8	16 - 1976/318/ 8.83H	LAT=	79.6
7 - 1976/317/ 11.22H	LAT=	9.0	17 - 1976/318/ 12.83H	LAT=	81.6
8 - 1976/317/ 12.35H	LAT=	31.3	18 - 1976/318/ 17.33H	LAT=	81.9
9 - 1976/317/ 14.00H	LAT=	45.9	19 - 1976/318/ 22.83H	LAT=	77.3
10 - 1976/317/ 17.17H	LAT=	58.1			

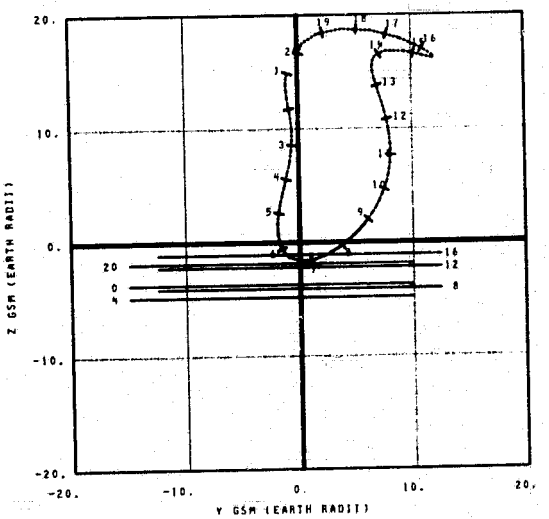
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/316/23.00H TO 1976/318/24.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/316/ 23.17H	R=	15.5RE	11 - 1976/317/ 14.42H	R=	11.6RE
2 - 1976/317/ 2.67H	R=	12.6RE	12 - 1976/317/ 18.50H	R=	13.6RE
3 - 1976/317/ 5.33H	R=	9.6RE	13 - 1976/317/ 21.00H	R=	15.6RE
4 - 1976/317/ 7.25H	R=	6.7RE	14 - 1976/318/ 1.33H	R=	18.1RE
5 - 1976/317/ 8.67H	R=	4.1RE	15 - 1976/318/ 5.33H	R=	19.5RE
6 - 1976/317/ 9.75H	R=	1.9RE	16 - 1976/318/ 12.33H	R=	20.3RE
7 - 1976/317/ 10.58H	R=	2.2RE	17 - 1976/318/ 15.33H	R=	20.0RE
8 - 1976/317/ 11.46H	R=	4.5RE	18 - 1976/318/ 17.33H	R=	19.7RE
9 - 1976/317/ 13.00H	R=	7.0RE	19 - 1976/318/ 19.83H	R=	18.9RE
10 - 1976/317/ 14.58H	R=	9.4RE	20 - 1976/318/ 23.83H	R=	17.1RE

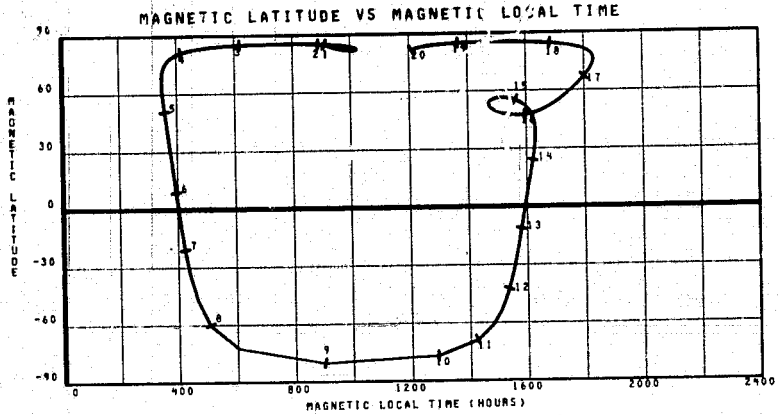
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/316/23.00H TO 1976/318/24.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

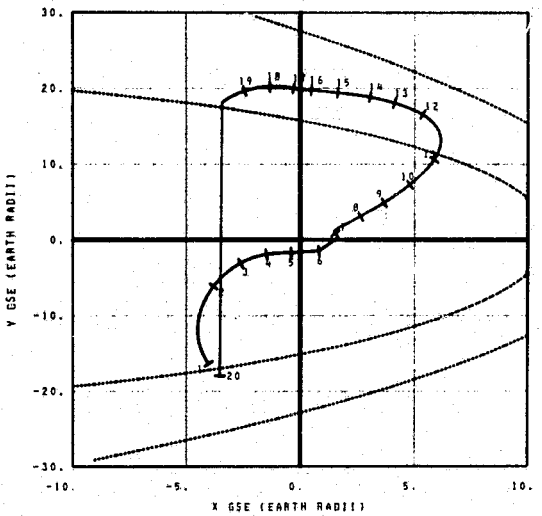
1 - 1976/316/ 23.17H	R=	15.5RE	8 - 1976/317/ 10.08H	R=	1.6RE	15 - 1976/317/ 20.50H	R=	15.2RE
2 - 1976/317/ 5.17H	R=	9.0RE	9 - 1976/317/ 10.25H	R=	1.8RE	16 - 1976/318/ 7.33H	R=	19.9RE
3 - 1976/317/ 6.00H	R=	8.7RE	10 - 1976/317/ 10.33H	R=	1.9RE	17 - 1976/318/ 15.33H	R=	20.0RE
4 - 1976/317/ 6.83H	R=	7.4RE	11 - 1976/317/ 10.92H	R=	2.0RE	18 - 1976/318/ 20.33H	R=	18.7RE
5 - 1976/317/ 8.83H	R=	3.8RE	12 - 1976/317/ 10.75H	R=	2.7RE	19 - 1976/318/ 21.83H	R=	18.1RE
6 - 1976/317/ 9.58H	R=	2.2RE	13 - 1976/317/ 11.57H	R=	4.4RE	20 - 1976/318/ 23.83H	R=	17.1RE
7 - 1976/317/ 9.83H	R=	1.8RE	14 - 1976/317/ 14.25H	R=	8.9RE			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/316 /23.00H TO1976/318 /24.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/319/ 0.33 H	LAT= 75.5	11 - 1976/319/ 20.17 H	LAT= 57.5
2 - 1976/319/ 10.17 H	LAT= 66.0	12 - 1976/320/ 3.17 H	LAT= 70.8
3 - 1976/319/ 11.92 H	LAT= 20.3	13 - 1976/320/ 5.67 H	LAT= 73.9
4 - 1976/319/ 12.67 H	LAT= -13.6	14 - 1976/320/ 7.17 H	LAT= 75.4
5 - 1976/319/ 13.08 H	LAT= -59.2	15 - 1976/320/ 8.67 H	LAT= 76.9
6 - 1976/319/ 13.25 H	LAT= -81.4	16 - 1976/320/ 9.67 H	LAT= 77.8
7 - 1976/319/ 13.42 H	LAT= -69.8	17 - 1976/320/ 11.17 H	LAT= 79.6
8 - 1976/319/ 14.58 H	LAT= 13.7	18 - 1976/320/ 15.17 H	LAT= 81.3
9 - 1976/319/ 15.67 H	LAT= 32.6	19 - 1976/320/ 19.67 H	LAT= 81.7
10 - 1976/319/ 17.33 H	LAT= 46.1	20 - 1976/321/ 0.67 H	LAT= 78.8

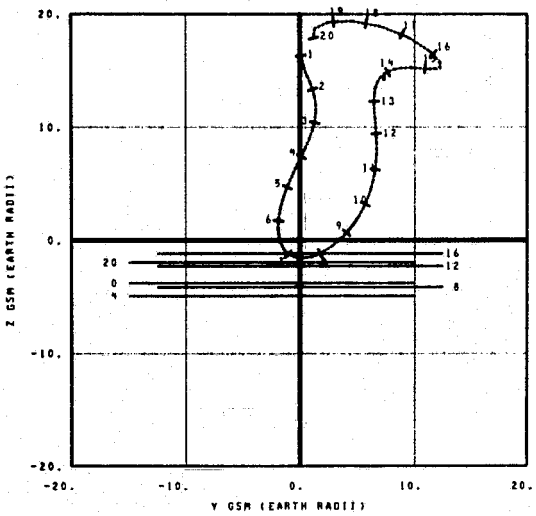
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/318/24.00H TO 1976/321/ 1.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/319/ 0.33 H	R= 16.0 R_E	11 - 1976/319/ 18.00 H	R= 9.4 R_E
2 - 1976/319/ 4.17 H	R= 19.1 R_E	12 - 1976/319/ 20.00 H	R= 12.0 R_E
3 - 1976/319/ 7.00 H	R= 11.4 R_E	13 - 1976/319/ 22.33 H	R= 19.1 R_E
4 - 1976/319/ 9.33 H	R= 8.5 R_E	14 - 1976/320/ 2.17 H	R= 16.0 R_E
5 - 1976/319/ 10.92 H	R= 6.0 R_E	15 - 1976/320/ 6.17 H	R= 18.7 R_E
6 - 1976/319/ 12.17 H	R= 3.5 R_E	16 - 1976/320/ 12.17 H	R= 20.2 R_E
7 - 1976/319/ 13.17 H	R= 1.7 R_E	17 - 1976/320/ 15.17 H	R= 20.3 R_E
8 - 1976/319/ 14.00 H	R= 2.0 R_E	18 - 1976/320/ 17.67 H	R= 20.2 R_E
9 - 1976/319/ 15.02 H	R= 4.9 R_E	19 - 1976/320/ 20.17 H	R= 19.7 R_E
10 - 1976/319/ 16.33 H	R= 7.2 R_E	20 - 1976/321/ 0.67 H	R= 10.3 R_E

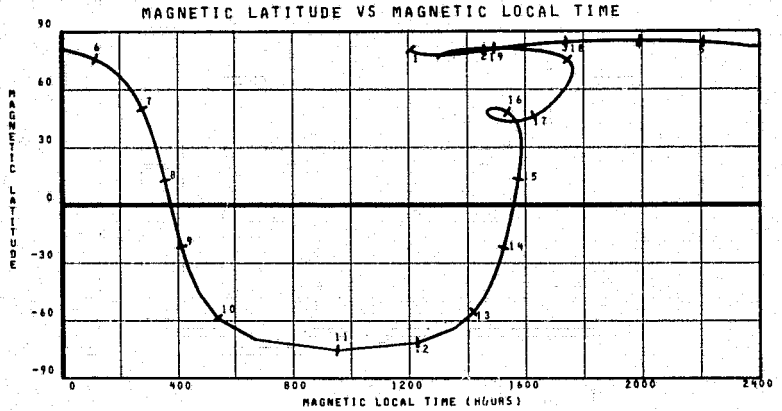
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/318/24.00H TO 1976/321/ 1.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

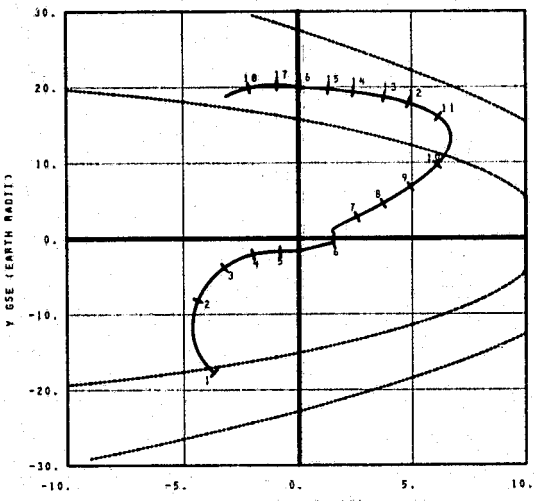
1 - 1976/319/ 0.33 H	R= 16.0 R_E	8 - 1976/319/ 12.67 H	R= 2.4 R_E	15 - 1976/319/ 19.50 H	R= 6.0 R_E
2 - 1976/319/ 5.83 H	R= 12.6 R_E	9 - 1976/319/ 13.00 H	R= 1.8 R_E	16 - 1976/319/ 20.67 H	R= 12.6 R_E
3 - 1976/319/ 7.67 H	R= 10.6 R_E	10 - 1976/319/ 13.25 H	R= 1.6 R_E	17 - 1976/320/ 0.17 H	R= 19.7 R_E
4 - 1976/319/ 8.33 H	R= 9.8 R_E	11 - 1976/319/ 13.42 H	R= 1.7 R_E	18 - 1976/320/ 10.17 H	R= 20.1 R_E
5 - 1976/319/ 8.83 H	R= 9.2 R_E	12 - 1976/319/ 13.58 H	R= 1.8 R_E	19 - 1976/320/ 21.17 H	R= 19.5 R_E
6 - 1976/319/ 10.17 H	R= 7.2 R_E	13 - 1976/319/ 13.67 H	R= 2.1 R_E		
7 - 1976/319/ 11.83 H	R= 4.2 R_E	14 - 1976/319/ 14.17 H	R= 3.2 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/318 /24.00H TO1976/321 / 1.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/321/ 1.17H	LAT= 78.3	11 - 1976/322/ 6.00H	LAT= 70.3		
2 - 1976/321/ 12.00H	LAT= 55.0	12 - 1976/322/ 8.83H	LAT= 73.0		
3 - 1976/321/ 19.67H	LAT= 30.6	13 - 1976/322/ 10.33H	LAT= 75.4		
4 - 1976/321/ 15.67H	LAT= 0.0	14 - 1976/322/ 11.83H	LAT= 76.0		
5 - 1976/321/ 16.17H	LAT= -41.8	15 - 1976/322/ 12.83H	LAT= 77.7		
6 - 1976/321/ 16.50H	LAT= -81.1	16 - 1976/322/ 13.83H	LAT= 78.9		
7 - 1976/321/ 17.70H	LAT= 11.0	17 - 1976/322/ 17.33H	LAT= 80.8		
8 - 1976/321/ 18.78H	LAT= 31.5	18 - 1976/322/ 21.83H	LAT= 81.9		
9 - 1976/321/ 20.33H	LAT= 44.8				
10 - 1976/321/ 22.75H	LAT= 55.5				

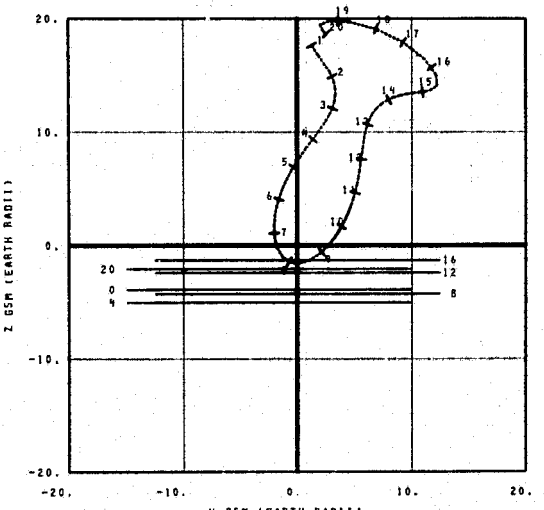
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/321/ 1.00H TO 1976/323/ 2.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/321/ 1.17H	R= 10.1RE	11 - 1976/321/ 19.83H	R= 7.7RE
2 - 1976/321/ 5.17H	R= 15.0RE	12 - 1976/321/ 21.50H	R= 10.1RE
3 - 1976/321/ 8.33H	R= 13.3RE	13 - 1976/321/ 24.00H	R= 12.0RE
4 - 1976/321/ 11.00H	R= 10.5RE	14 - 1976/322/ 3.17H	R= 15.4RE
5 - 1976/321/ 12.83H	R= 8.1RE	15 - 1976/322/ 6.67H	R= 17.5RE
6 - 1976/321/ 14.33H	R= 5.6RE	16 - 1976/322/ 12.33H	R= 19.6RE
7 - 1976/321/ 15.50H	R= 3.2RE	17 - 1976/322/ 15.33H	R= 20.2RE
8 - 1976/321/ 16.42H	R= 1.6RE	18 - 1976/322/ 17.33H	R= 20.3RE
9 - 1976/321/ 17.33H	R= 3.1RE	19 - 1976/322/ 20.33H	R= 20.2RE
10 - 1976/321/ 18.17H	R= 5.2RE	20 - 1976/323/ 1.83H	R= 19.1RE

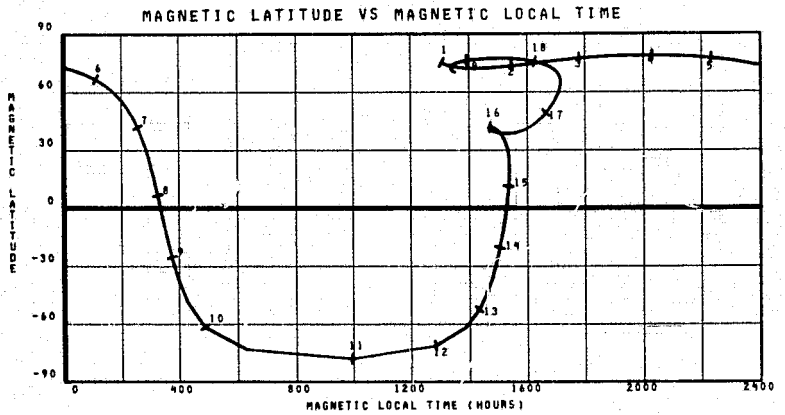
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/321/ 1.00H TO 1976/323/ 2.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

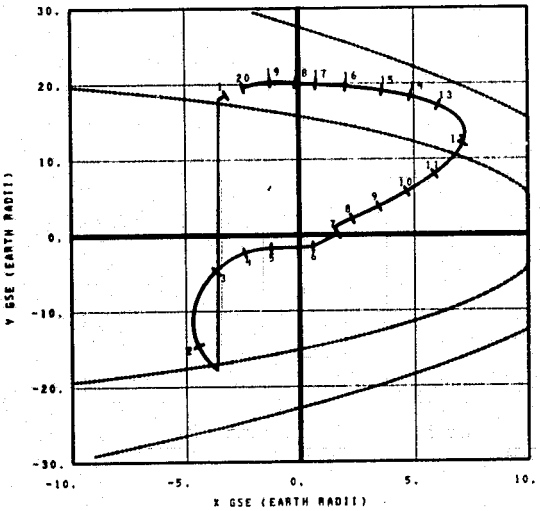
1 - 1976/321/ 1.17H	R= 10.1RE	9 - 1976/321/ 19.83H	R= 2.5RE
2 - 1976/321/ 4.50H	R= 14.0RE	10 - 1976/321/ 16.17H	R= 1.9RE
3 - 1976/321/ 9.00H	R= 12.7RE	11 - 1976/321/ 16.92H	R= 1.6RE
4 - 1976/321/ 10.50H	R= 11.1RE	12 - 1976/321/ 16.50H	R= 1.7RE
5 - 1976/321/ 11.50H	R= 9.0RE	13 - 1976/321/ 17.67H	R= 1.0RE
6 - 1976/321/ 13.33H	R= 7.3RE	14 - 1976/321/ 16.83H	R= 2.0RE
7 - 1976/321/ 15.00H	R= 4.3RE	15 - 1976/321/ 17.25H	R= 2.0RE
		16 - 1976/321/ 18.25H	R= 3.0RE
		17 - 1976/321/ 23.83H	R= 12.6RE
		18 - 1976/322/ 11.83H	R= 19.5RE
		19 - 1976/322/ 19.33H	R= 20.3RE
		20 - 1976/322/ 22.33H	R= 20.0RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/321 / 1.00H TO1976/323 / 2.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/323/ 2.33 H	LAT=	80.1	11 - 1976/324/ 0.67 H	LAT=	59.6
2 - 1976/323/ 9.17 H	LAT=	72.1	12 - 1976/324/ 4.50 H	LAT=	62.2
3 - 1976/323/ 17.33 H	LAT=	38.6	13 - 1976/324/ 11.17 H	LAT=	72.7
4 - 1976/323/ 18.67 H	LAT=	9.7	14 - 1976/324/ 13.17 H	LAT=	74.9
5 - 1976/323/ 19.25 H	LAT=	-27.6	15 - 1976/324/ 14.67 H	LAT=	76.9
6 - 1976/323/ 19.67 H	LAT=	-61.2	16 - 1976/324/ 16.17 H	LAT=	77.8
7 - 1976/323/ 19.75 H	LAT=	-76.9	17 - 1976/324/ 17.17 H	LAT=	78.6
8 - 1976/323/ 20.58 H	LAT=	-8.8	18 - 1976/324/ 18.17 H	LAT=	79.3
9 - 1976/323/ 21.92 H	LAT=	24.9	19 - 1976/324/ 22.17 H	LAT=	81.9
10 - 1976/323/ 22.83 H	LAT=	39.8	20 - 1976/325/ 2.67 H	LAT=	81.6

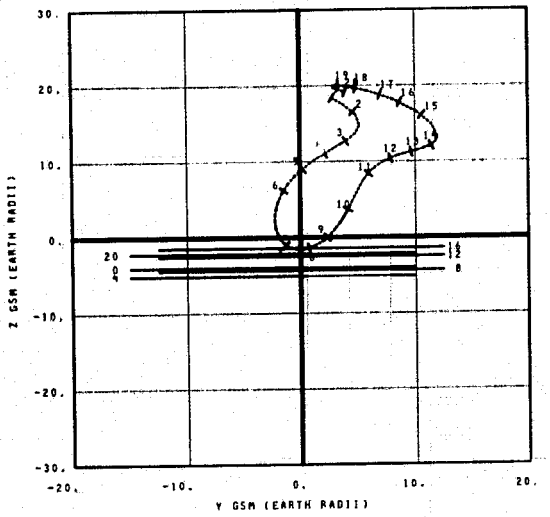
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/323/ 2.00H TO 1976/325/ 3.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/323/ 2.33 H	R=	18.9 R_E	11 - 1976/324/ 1.50 H	R=	18.9 R_E
2 - 1976/323/ 5.33 H	R=	17.4 R_E	12 - 1976/324/ 4.00 H	R=	15.5 R_E
3 - 1976/323/ 10.67 H	R=	14.1 R_E	13 - 1976/324/ 6.00 H	R=	15.1 R_E
4 - 1976/323/ 12.67 H	R=	12.2 R_E	14 - 1976/324/ 8.50 H	R=	16.0 R_E
5 - 1976/323/ 14.50 H	R=	10.2 R_E	15 - 1976/324/ 14.17 H	R=	19.3 R_E
6 - 1976/323/ 16.33 H	R=	7.4 R_E	16 - 1976/324/ 16.17 H	R=	19.8 R_E
7 - 1976/323/ 19.33 H	R=	1.9 R_E	17 - 1976/324/ 17.67 H	R=	20.1 R_E
8 - 1976/323/ 20.00 H	R=	1.9 R_E	18 - 1976/324/ 19.67 H	R=	20.3 R_E
9 - 1976/323/ 20.67 H	R=	3.3 R_E	19 - 1976/324/ 21.67 H	R=	20.3 R_E
10 - 1976/323/ 22.33 H	R=	6.5 R_E	20 - 1976/325/ 2.67 H	R=	19.7 R_E

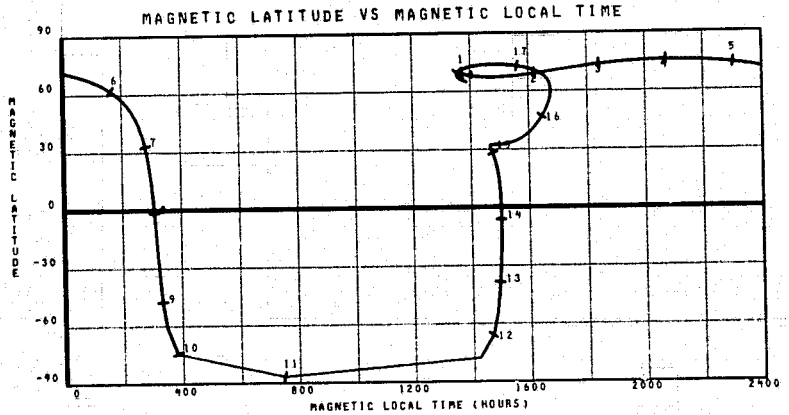
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/323/ 2.00H TO 1976/325/ 3.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

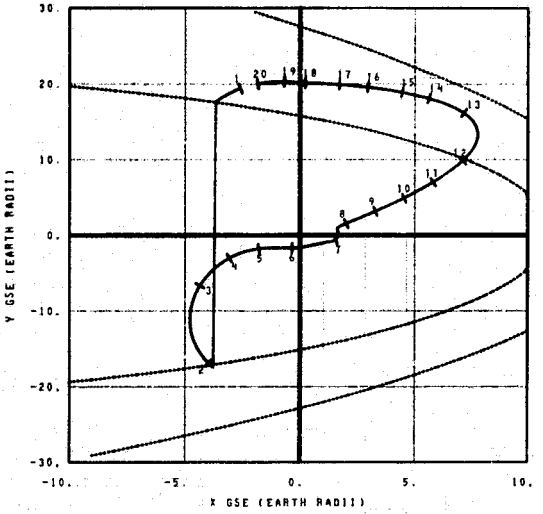
1 - 1976/323/ 2.33 H	R=	18.9 R_E	8 - 1976/323/ 19.08 H	R=	2.4 R_E	15 - 1976/324/ 23.50 H	R=	8.4 R_E
2 - 1976/323/ 7.83 H	R=	16.2 R_E	9 - 1976/323/ 19.50 H	R=	1.7 R_E	16 - 1976/324/ 12.17 H	R=	18.6 R_E
3 - 1976/323/ 10.67 H	R=	14.1 R_E	10 - 1976/323/ 19.67 H	R=	1.6 R_E	17 - 1976/324/ 19.67 H	R=	20.3 R_E
4 - 1976/323/ 12.50 H	R=	12.4 R_E	11 - 1976/323/ 19.75 H	R=	1.7 R_E	18 - 1976/325/ 0.17 H	R=	20.2 R_E
5 - 1976/323/ 14.00 H	R=	10.8 R_E	12 - 1976/323/ 19.92 H	R=	1.8 R_E			
6 - 1976/323/ 16.33 H	R=	7.6 R_E	13 - 1976/323/ 20.17 H	R=	2.3 R_E			
7 - 1976/323/ 18.33 H	R=	4.8 R_E	14 - 1976/323/ 20.75 H	R=	3.5 R_E			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/323 / 2.00H TO1976/325 / 3.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/325/	3.17H	LAT= 81.9	11 - 1976/326/	3.25H	LAT= 67.5
2 - 1976/325/	9.17H	LAT= 76.7	12 - 1976/326/	5.83H	LAT= 57.9
3 - 1976/325/	19.33H	LAT= 59.6	13 - 1976/326/	13.33H	LAT= 71.9
4 - 1976/325/	21.92H	LAT= 23.7	14 - 1976/326/	16.33H	LAT= 74.9
5 - 1976/325/	22.25H	LAT= -10.3	15 - 1976/326/	17.83H	LAT= 76.3
6 - 1976/325/	22.75H	LAT= -65.2	16 - 1976/326/	19.33H	LAT= 77.7
7 - 1976/325/	22.92H	LAT= -81.0	17 - 1976/326/	20.33H	LAT= 78.5
8 - 1976/325/	23.50H	LAT= -17.0	18 - 1976/326/	21.33H	LAT= 79.3
9 - 1976/326/	0.45H	LAT= 19.3	19 - 1976/326/	23.83H	LAT= 80.8
10 - 1976/326/	1.63H	LAT= 36.1	20 - 1976/327/	3.83H	LAT= 81.9

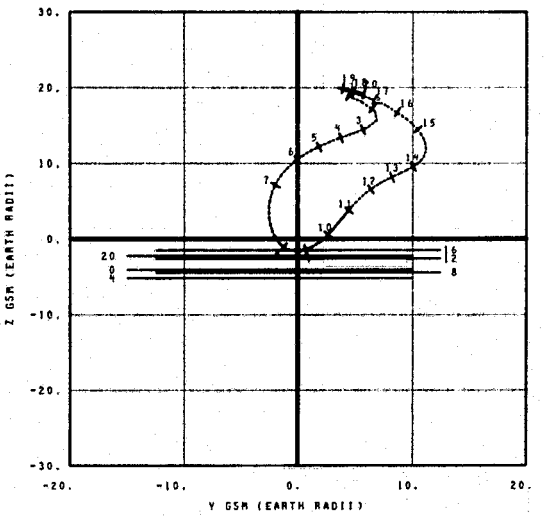
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/325/ 3.00H TO 1976/327/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/325/	3.17H	R= 19.6R_E	11 - 1976/326/	1.72H	R= 6.0R_E
2 - 1976/325/	6.17H	R= 18.7R_E	12 - 1976/326/	3.83H	R= 9.9R_E
3 - 1976/325/	11.17H	R= 16.1R_E	13 - 1976/326/	5.83H	R= 12.2R_E
4 - 1976/325/	13.17H	R= 14.6R_E	14 - 1976/326/	8.17H	R= 14.3R_E
5 - 1976/325/	14.83H	R= 13.2R_E	15 - 1976/326/	14.00H	R= 18.0R_E
6 - 1976/325/	16.50H	R= 11.9R_E	16 - 1976/326/	16.33H	R= 18.9R_E
7 - 1976/325/	18.83H	R= 8.7R_E	17 - 1976/326/	18.33H	R= 19.9R_E
8 - 1976/325/	22.50H	R= 2.0R_E	18 - 1976/326/	20.33H	R= 20.0R_E
9 - 1976/325/	23.17H	R= 1.9R_E	19 - 1976/327/	1.33H	R= 20.3R_E
10 - 1976/326/	0.08H	R= 3.0R_E	20 - 1976/327/	3.83H	R= 20.1R_E

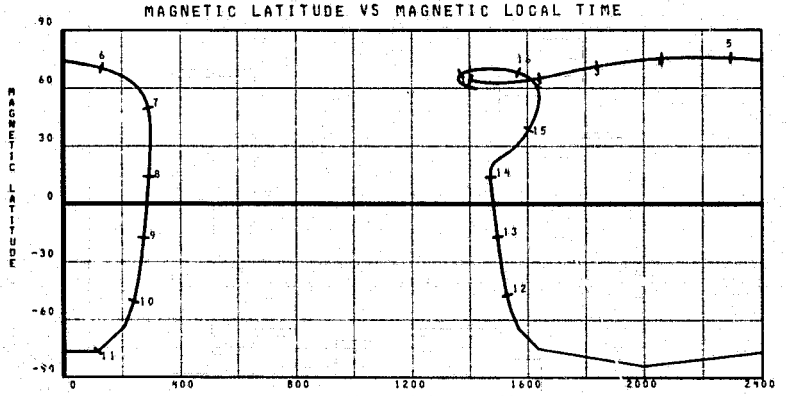
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/325/ 3.00H TO 1976/327/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

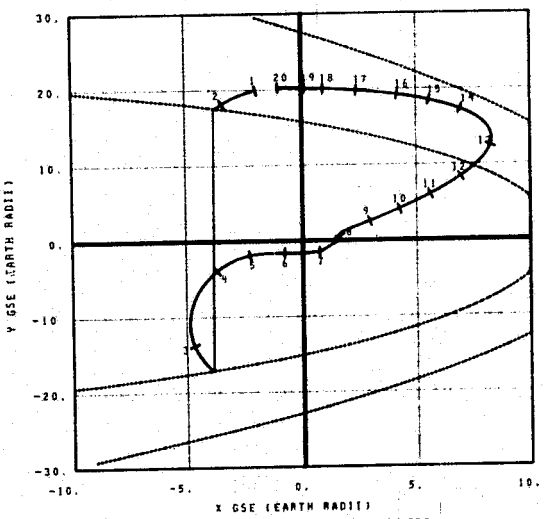
1 - 1976/325/	3.17H	R= 19.6R_E	8 - 1976/325/	22.08H	R= 2.9R_E	15 - 1976/326/	11.00H	R= 16.4R_E
2 - 1976/325/	6.67H	R= 17.5R_E	9 - 1976/325/	22.50H	R= 2.0R_E	16 - 1976/326/	18.83H	R= 19.7R_E
3 - 1976/325/	11.83H	R= 15.6R_E	10 - 1976/325/	22.75H	R= 1.7R_E	17 - 1976/326/	23.33H	R= 20.3R_E
4 - 1976/325/	14.00H	R= 14.0R_E	11 - 1976/325/	22.92H	R= 1.6R_E			
5 - 1976/325/	15.67H	R= 12.9R_E	12 - 1976/325/	23.33H	R= 2.2R_E			
6 - 1976/325/	17.67H	R= 10.2R_E	13 - 1976/325/	23.83H	R= 3.2R_E			
7 - 1976/325/	20.67H	R= 5.7R_E	14 - 1976/326/	1.78H	R= 7.0R_E			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/325 / 3.00H TO1976/327 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/327/	9.33 H	LAT=	81.9	11 - 1976/328/	5.83 H	LAT=	83.9
2 - 1976/327/	9.83 H	LAT=	79.3	12 - 1976/328/	7.83 H	LAT=	83.9
3 - 1976/327/	16.50 H	LAT=	70.5	13 - 1976/328/	12.17 H	LAT=	69.6
4 - 1976/328/	0.00 H	LAT=	33.9	14 - 1976/328/	10.67 H	LAT=	73.8
5 - 1976/328/	1.25 H	LAT=	1.7	15 - 1976/328/	20.67 H	LAT=	79.9
6 - 1976/328/	1.83 H	LAT=	-48.4	16 - 1976/328/	22.17 H	LAT=	77.3
7 - 1976/328/	2.08 H	LAT=	-81.7	17 - 1976/328/	23.67 H	LAT=	78.6
8 - 1976/328/	2.25 H	LAT=	-69.0	18 - 1976/329/	0.67 H	LAT=	79.3
9 - 1976/328/	3.33 H	LAT=	11.2	19 - 1976/329/	1.17 H	LAT=	79.7
10 - 1976/328/	4.50 H	LAT=	31.0	20 - 1976/329/	4.67 H	LAT=	81.5

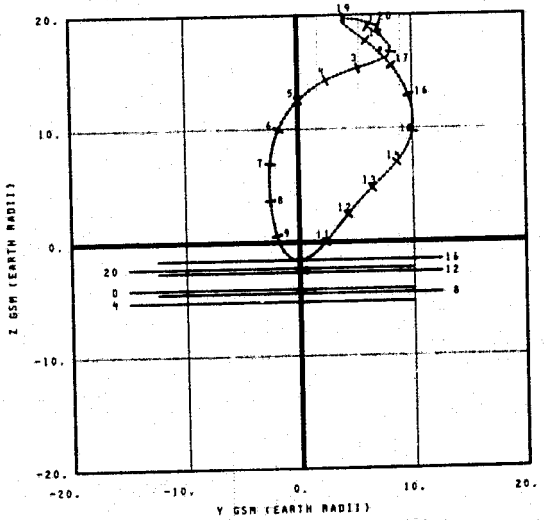
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/327/ 4.00H TO 1976/329/ 5.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/327/	9.33 H	R=	20.0 RE	11 - 1976/328/	3.17 H	R=	3.9 RE
2 - 1976/327/	9.83 H	R=	18.9 RE	12 - 1976/328/	4.50 H	R=	6.1 RE
3 - 1976/327/	13.33 H	R=	16.7 RE	13 - 1976/328/	6.33 H	R=	9.0 RE
4 - 1976/327/	15.67 H	R=	15.2 RE	14 - 1976/328/	8.67 H	R=	11.6 RE
5 - 1976/327/	17.83 H	R=	13.9 RE	15 - 1976/328/	11.50 H	R=	14.9 RE
6 - 1976/327/	20.00 H	R=	11.2 RE	16 - 1976/328/	14.33 H	R=	16.9 RE
7 - 1976/327/	22.00 H	R=	8.7 RE	17 - 1976/328/	16.67 H	R=	17.7 RE
8 - 1976/327/	23.75 H	R=	5.9 RE	18 - 1976/328/	19.17 H	R=	18.8 RE
9 - 1976/328/	1.00 H	R=	3.3 RE	19 - 1976/329/	0.67 H	R=	20.1 RE
10 - 1976/328/	2.17 H	R=	1.7 RE	20 - 1976/329/	4.67 H	R=	20.3 RE

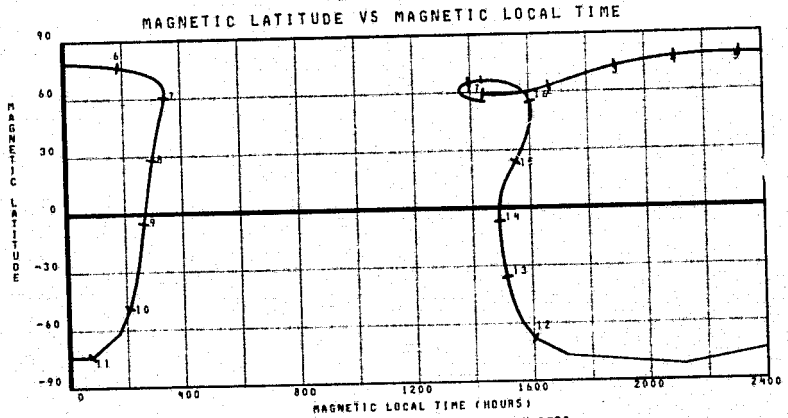
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/327/ 4.00H TO 1976/329/ 5.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

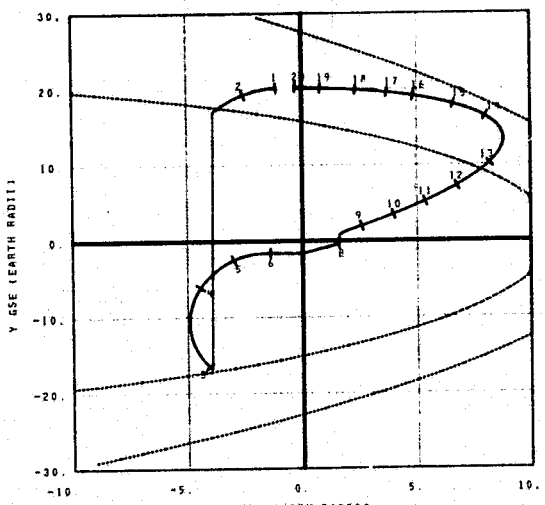
1 - 1976/327/	9.33 H	R=	20.0 RE	8 - 1976/328/	1.17 H	R=	3.1 RE	15 - 1976/328/	8.83 H	R=	12.0 RE
2 - 1976/327/	9.83 H	R=	18.9 RE	9 - 1976/328/	1.67 H	R=	2.1 RE	16 - 1976/328/	14.00 H	R=	17.9 RE
3 - 1976/327/	13.83 H	R=	16.7 RE	10 - 1976/328/	2.00 H	R=	1.7 RE	17 - 1976/328/	22.17 H	R=	19.7 RE
4 - 1976/327/	15.83 H	R=	15.1 RE	11 - 1976/328/	2.17 H	R=	1.7 RE				
5 - 1976/327/	17.33 H	R=	13.8 RE	12 - 1976/328/	2.42 H	R=	2.0 RE				
6 - 1976/327/	19.33 H	R=	11.9 RE	13 - 1976/328/	2.83 H	R=	2.8 RE				
7 - 1976/327/	23.33 H	R=	8.7 RE	14 - 1976/328/	5.83 H	R=	9.9 RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/327 / 4.00H TO1976/329 / 5.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/329/	5.17H	LAT=	81.6	11 - 1976/330/	8.50H	LAT=	46.8
2 - 1976/329/	10.17H	LAT=	81.2	12 - 1976/330/	10.25H	LAT=	58.2
3 - 1976/329/	16.17H	LAT=	76.1	13 - 1976/330/	13.17H	LAT=	59.7
4 - 1976/330/	2.00H	LAT=	47.8	14 - 1976/330/	21.00H	LAT=	72.8
5 - 1976/330/	4.00H	LAT=	19.0	15 - 1976/330/	23.50H	LAT=	75.5
6 - 1976/330/	4.83H	LAT=	-25.3	16 - 1976/331/	1.50H	LAT=	77.4
7 - 1976/330/	5.25H	LAT=	-79.0	17 - 1976/331/	2.50H	LAT=	78.2
8 - 1976/330/	5.33H	LAT=	-79.8	18 - 1976/331/	3.50H	LAT=	79.0
9 - 1976/330/	6.25H	LAT=	1.3	19 - 1976/331/	4.50H	LAT=	79.7
10 - 1976/330/	7.25H	LAT=	26.0	20 - 1976/331/	6.00H	LAT=	80.4

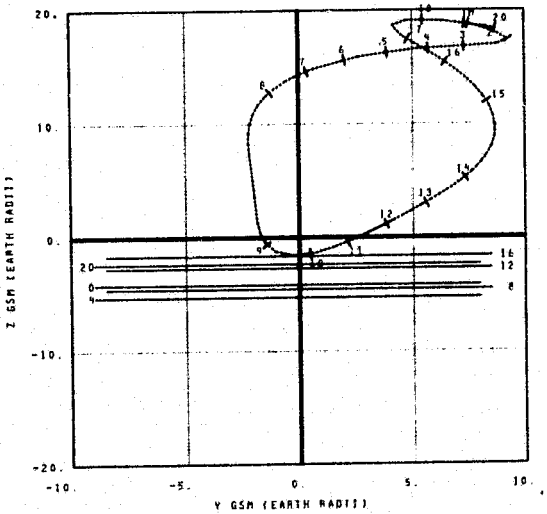
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/329/ 5.00H TO 1976/331/ 6.00H

HAWKEYE 1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/329/	5.17H	R=	20.3R_E	11 - 1976/330/	6.33H	R=	3.9R_E
2 - 1976/329/	8.67H	R=	19.4R_E	12 - 1976/330/	7.28H	R=	5.4R_E
3 - 1976/329/	12.67H	R=	18.6R_E	13 - 1976/330/	8.58H	R=	7.6R_E
4 - 1976/329/	16.17H	R=	18.0R_E	14 - 1976/330/	10.33H	R=	10.0R_E
5 - 1976/329/	19.67H	R=	17.2R_E	15 - 1976/330/	15.50H	R=	15.0R_E
6 - 1976/329/	23.17H	R=	16.3R_E	16 - 1976/330/	18.50H	R=	17.0R_E
7 - 1976/329/	18.67H	R=	15.3R_E	17 - 1976/330/	21.00H	R=	18.3R_E
8 - 1976/329/	20.67H	R=	13.7R_E	18 - 1976/331/	2.50H	R=	19.9R_E
9 - 1976/330/	4.83H	R=	2.1R_E	19 - 1976/331/	4.50H	R=	20.2R_E
10 - 1976/330/	5.67H	R=	2.0R_E	20 - 1976/331/	6.00H	R=	20.3R_E

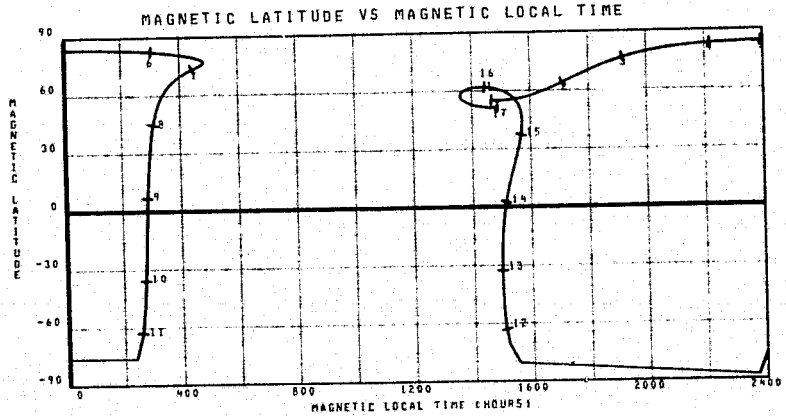
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/329/ 5.00H TO 1976/331/ 6.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

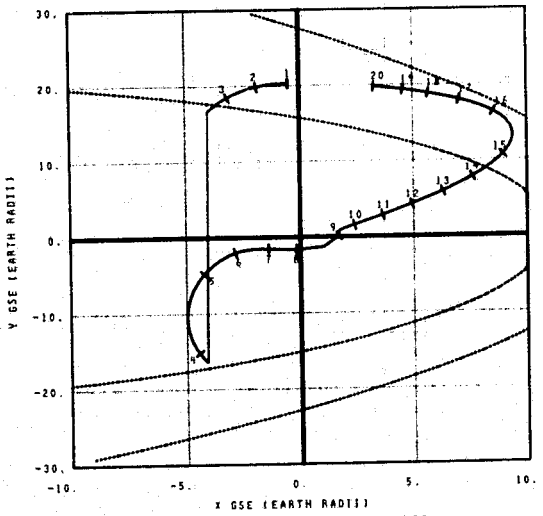
1 - 1976/329/	5.17H	R=	20.3R_E	8 - 1976/330/	4.17H	R=	3.6R_E	15 - 1976/330/	13.33H	R=	13.2R_E
2 - 1976/329/	11.67H	R=	19.0R_E	9 - 1976/330/	4.83H	R=	2.1R_E	16 - 1976/330/	20.50H	R=	18.0R_E
3 - 1976/329/	19.67H	R=	17.2R_E	10 - 1976/330/	5.17H	R=	1.7R_E	17 - 1976/331/	6.00H	R=	20.3R_E
4 - 1976/329/	16.17H	R=	15.7R_E	11 - 1976/330/	5.33H	R=	1.6R_E				
5 - 1976/329/	19.00H	R=	15.1R_E	12 - 1976/330/	5.75H	R=	2.2R_E				
6 - 1976/329/	20.67H	R=	13.7R_E	13 - 1976/330/	6.25H	R=	3.3R_E				
7 - 1976/330/	1.67H	R=	8.0R_E	14 - 1976/330/	8.00H	R=	6.0R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/329 / 5.00H TO1976/331 / 6.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/331/ 6.50 H	LAT= 80.9	11 - 1976/332/ 10.10 H	LAT= 20.0
2 - 1976/331/ 11.00 H	LAT= 81.9	12 - 1976/332/ 11.13 H	LAT= 34.6
3 - 1976/331/ 15.50 H	LAT= 80.0	13 - 1976/332/ 12.50 H	LAT= 45.3
4 - 1976/331/ 21.17 H	LAT= 73.6	14 - 1976/332/ 14.25 H	LAT= 53.3
5 - 1976/332/ 5.92 H	LAT= 41.9	15 - 1976/332/ 17.33 H	LAT= 61.9
6 - 1976/332/ 7.42 H	LAT= 12.2	16 - 1976/333/ 0.67 H	LAT= 73.2
7 - 1976/332/ 8.08 H	LAT= -30.0	17 - 1976/333/ 3.17 H	LAT= 75.9
8 - 1976/332/ 8.42 H	LAT= -74.2	18 - 1976/333/ 4.67 H	LAT= 77.3
9 - 1976/332/ 8.58 H	LAT= -74.0	19 - 1976/333/ 5.67 H	LAT= 78.1
10 - 1976/332/ 9.25 H	LAT= -8.3	20 - 1976/333/ 6.67 H	LAT= 78.9

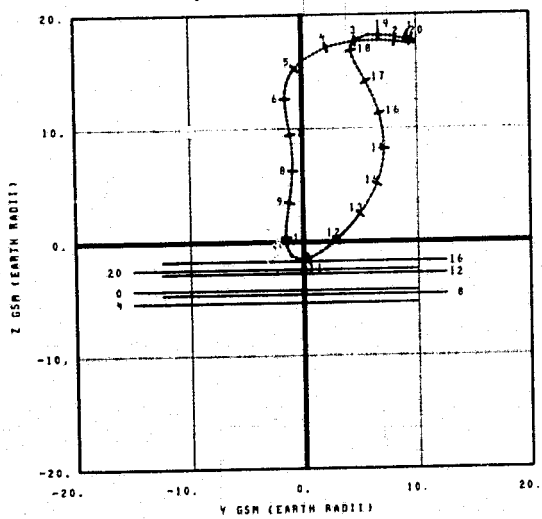
TIME AS YEAR/DAY/HOUR

LAT IS GSE LAYITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/331/ 6.00H TO 1976/333/ 7.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/331/ 6.50 H	R= 20.3 R_E	11 - 1976/332/ 6.92 H	R= 2.1 R_E
2 - 1976/331/ 11.00 H	R= 19.3 R_E	12 - 1976/332/ 9.93 H	R= 4.3 R_E
3 - 1976/331/ 16.00 H	R= 18.6 R_E	13 - 1976/332/ 11.33 H	R= 6.9 R_E
4 - 1976/331/ 18.00 H	R= 17.7 R_E	14 - 1976/332/ 13.00 H	R= 9.3 R_E
5 - 1976/331/ 21.00 H	R= 15.9 R_E	15 - 1976/332/ 15.00 H	R= 11.7 R_E
6 - 1976/331/ 24.00 H	R= 13.6 R_E	16 - 1976/332/ 17.17 H	R= 13.8 R_E
7 - 1976/332/ 2.83 H	R= 10.7 R_E	17 - 1976/332/ 19.50 H	R= 15.6 R_E
8 - 1976/332/ 5.00 H	R= 7.8 R_E	18 - 1976/332/ 22.83 H	R= 17.4 R_E
9 - 1976/332/ 6.50 H	R= 5.3 R_E	19 - 1976/333/ 5.67 H	R= 19.5 R_E
10 - 1976/332/ 7.75 H	R= 2.7 R_E	20 - 1976/333/ 6.67 H	R= 20.1 R_E

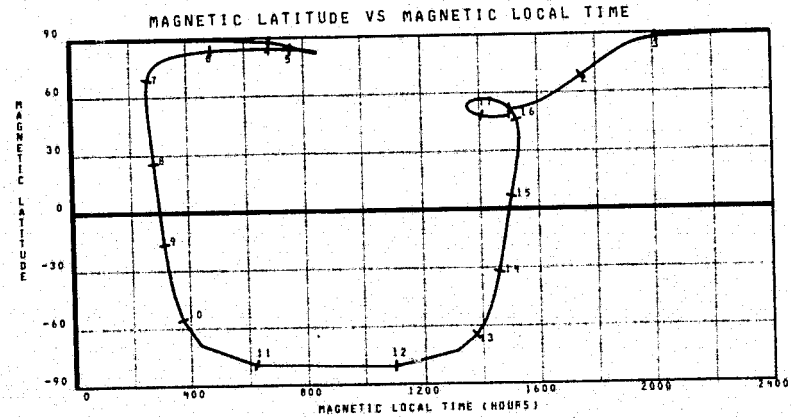
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/331/ 6.00H TO 1976/333/ 7.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

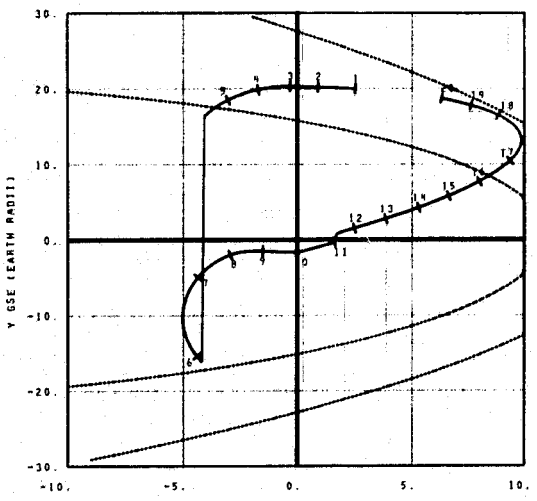
1 - 1976/331/ 6.50 H	R= 20.3 R_E	8 - 1976/332/ 7.83 H	R= 2.9 R_E	15 - 1976/332/ 11.17 H	R= 6.6 R_E
2 - 1976/331/ 14.00 H	R= 19.3 R_E	9 - 1976/332/ 8.25 H	R= 1.8 R_E	16 - 1976/332/ 14.50 H	R= 13.2 R_E
3 - 1976/331/ 19.50 H	R= 16.9 R_E	10 - 1976/332/ 8.50 H	R= 1.6 R_E	17 - 1976/333/ 3.67 H	R= 19.5 R_E
4 - 1976/331/ 21.00 H	R= 15.9 R_E	11 - 1976/332/ 8.67 H	R= 1.7 R_E		
5 - 1976/332/ 3.50 H	R= 9.9 R_E	12 - 1976/332/ 8.75 H	R= 1.9 R_E		
6 - 1976/332/ 4.67 H	R= 8.3 R_E	13 - 1976/332/ 8.92 H	R= 2.1 R_E		
7 - 1976/332/ 6.50 H	R= 5.3 R_E	14 - 1976/332/ 9.42 H	R= 2.2 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/331 / 6 00H TO19T6/333 / 7 00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/333/	7.17H	LAT=	79.3	11 - 1976/334/	11.75H	LAT=	-78.8
2 - 1976/333/	8.17H	LAT=	79.9	12 - 1976/334/	12.50H	LAT=	-5.9
3 - 1976/333/	9.67H	LAT=	80.8	13 - 1976/334/	13.37H	LAT=	21.2
4 - 1976/333/	14.17H	LAT=	81.9	14 - 1976/334/	14.50H	LAT=	36.9
5 - 1976/333/	18.67H	LAT=	80.1	15 - 1976/334/	15.83H	LAT=	46.0
6 - 1976/334/	0.17H	LAT=	79.0	16 - 1976/334/	17.67H	LAT=	59.0
7 - 1976/334/	9.00H	LAT=	42.8	17 - 1976/334/	20.67H	LAT=	62.1
8 - 1976/334/	10.50H	LAT=	13.6	18 - 1976/335/	4.50H	LAT=	73.9
9 - 1976/334/	11.25H	LAT=	-26.1	19 - 1976/335/	6.50H	LAT=	75.9
10 - 1976/334/	11.67H	LAT=	-79.9	20 - 1976/335/	8.00H	LAT=	77.3

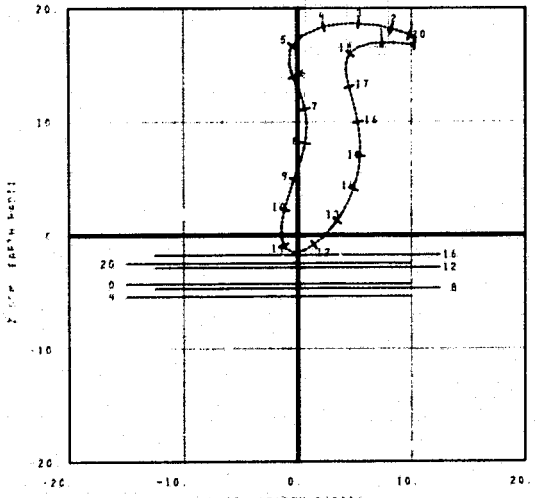
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/333/ 7.00H TO 1976/335/ 8.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/333/	7.17H	R=	20.1R_E	11 - 1976/334/	11.92H	R=	1.8R_E
2 - 1976/333/	13.67H	R=	20.1R_E	12 - 1976/334/	12.50H	R=	2.9R_E
3 - 1976/333/	16.17H	R=	19.6R_E	13 - 1976/334/	13.60H	R=	5.2R_E
4 - 1976/333/	18.67H	R=	18.8R_E	14 - 1976/334/	15.00H	R=	7.7R_E
5 - 1976/333/	22.17H	R=	17.2R_E	15 - 1976/334/	16.75H	R=	10.8R_E
6 - 1976/334/	1.83H	R=	14.8R_E	16 - 1976/334/	18.67H	R=	12.2R_E
7 - 1976/334/	9.67H	R=	12.2R_E	17 - 1976/334/	21.17H	R=	14.5R_E
8 - 1976/334/	7.00H	R=	9.5R_E	18 - 1976/335/	0.83H	R=	17.0R_E
9 - 1976/334/	9.00H	R=	6.6R_E	19 - 1976/335/	4.50H	R=	18.7R_E
10 - 1976/334/	10.25H	R=	4.2R_E	20 - 1976/335/	8.00H	R=	19.7R_E

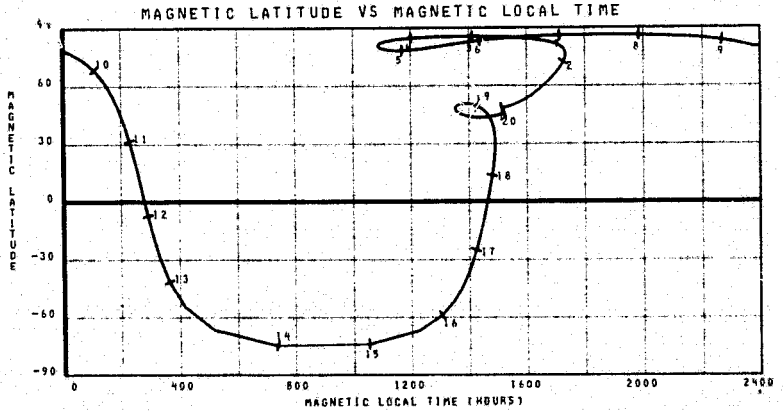
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/333/ 7.00H TO 1976/335/ 8.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

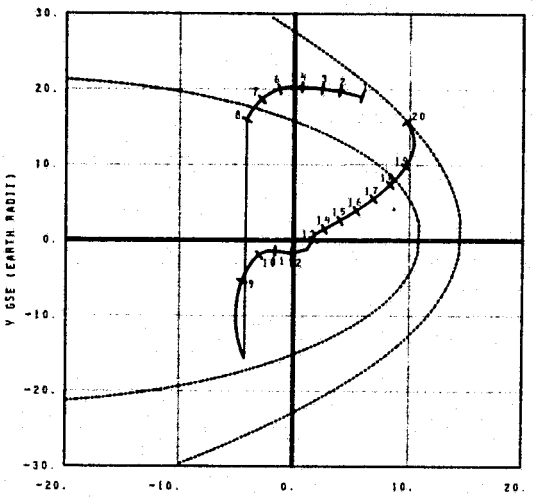
1 - 1976/333/	7.17H	R=	20.1R_E	8 - 1976/334/	7.17H	R=	9.3R_E	15 - 1976/334/	11.92H	R=	1.8R_E
2 - 1976/333/	13.67H	R=	19.7R_E	9 - 1976/334/	7.83H	R=	8.4R_E	16 - 1976/334/	12.08H	R=	2.1R_E
3 - 1976/333/	20.17H	R=	18.2R_E	10 - 1976/334/	9.42H	R=	5.8R_E	17 - 1976/334/	12.58H	R=	3.1R_E
4 - 1976/333/	21.17H	R=	17.7R_E	11 - 1976/334/	10.83H	R=	3.0R_E	18 - 1976/334/	14.17H	R=	6.2R_E
5 - 1976/334/	2.33H	R=	14.9R_E	12 - 1976/334/	11.33H	R=	2.0R_E	19 - 1976/334/	19.83H	R=	13.3R_E
6 - 1976/334/	5.67H	R=	11.1R_E	13 - 1976/334/	11.58H	R=	1.7R_E	20 - 1976/335/	8.00H	R=	19.7R_E
7 - 1976/334/	6.67H	R=	10.0R_E	14 - 1976/334/	11.83H	R=	1.7R_E				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/333 / 7.00H TO1976/335 / 8.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/335/ 8.50 H	LAT= 77.8	11 - 1976/336/ 14.42 H	LAT= -22.9
2 - 1976/335/ 10.00 H	LAT= 78.9	12 - 1976/336/ 14.83 H	LAT= -75.3
3 - 1976/335/ 11.00 H	LAT= 79.7	13 - 1976/336/ 15.00 H	LAT= -72.9
4 - 1976/335/ 12.00 H	LAT= 80.3	14 - 1976/336/ 15.75 H	LAT= -3.7
5 - 1976/335/ 12.50 H	LAT= 80.6	15 - 1976/336/ 16.58 H	LAT= 21.9
6 - 1976/335/ 16.50 H	LAT= 81.9	16 - 1976/336/ 17.63 H	LAT= 35.6
7 - 1976/335/ 21.50 H	LAT= 80.9	17 - 1976/336/ 19.00 H	LAT= 45.7
8 - 1976/336/ 2.50 H	LAT= 75.3	18 - 1976/336/ 20.83 H	LAT= 53.8
9 - 1976/336/ 11.92 H	LAT= 45.6	19 - 1976/336/ 23.50 H	LAT= 61.3
10 - 1976/336/ 13.75 H	LAT= 15.0	20 - 1976/337/ 7.17 H	LAT= 73.2

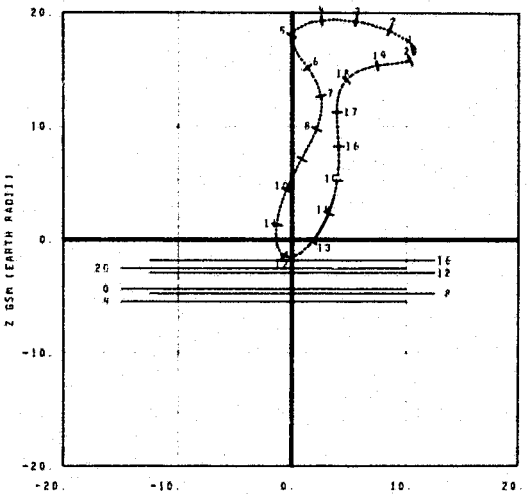
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/335/ 8.00H TO 1976/337/ 9.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/335/ 8.50 H	R= 19.9 R_E	11 - 1976/336/ 13.75 H	R= 3.6 R_E
2 - 1976/335/ 14.00 H	R= 20.3 R_E	12 - 1976/336/ 14.83 H	R= 1.6 R_E
3 - 1976/335/ 16.50 H	R= 20.1 R_E	13 - 1976/336/ 15.92 H	R= 3.9 R_E
4 - 1976/335/ 19.00 H	R= 19.6 R_E	14 - 1976/336/ 17.03 H	R= 5.6 R_E
5 - 1976/335/ 23.00 H	R= 18.1 R_E	15 - 1976/336/ 18.50 H	R= 8.1 R_E
6 - 1976/336/ 3.50 H	R= 15.9 R_E	16 - 1976/336/ 20.25 H	R= 10.9 R_E
7 - 1976/336/ 6.17 H	R= 13.8 R_E	17 - 1976/336/ 22.50 H	R= 12.8 R_E
8 - 1976/336/ 8.83 H	R= 11.2 R_E	18 - 1976/337/ 1.67 H	R= 15.5 R_E
9 - 1976/336/ 10.83 H	R= 8.7 R_E	19 - 1976/337/ 4.83 H	R= 17.9 R_E
10 - 1976/336/ 12.92 H	R= 6.2 R_E	20 - 1976/337/ 8.67 H	R= 19.0 R_E

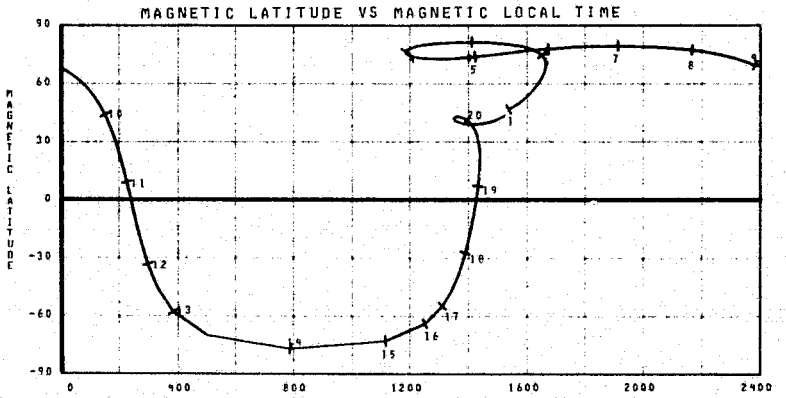
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/335/ 8.00H TO 1976/337/ 9.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

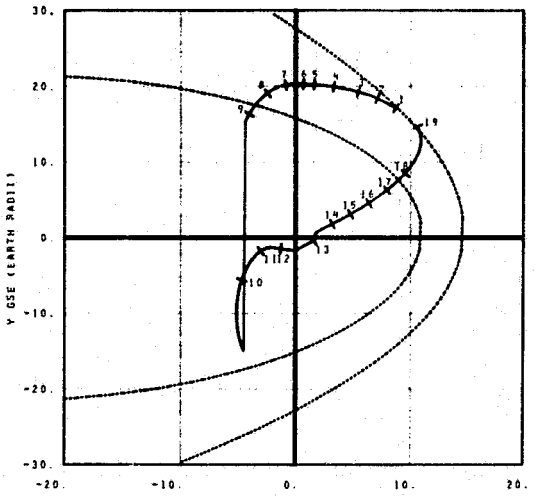
1 - 1976/335/ 8.50 H	R= 19.9 R_E	8 - 1976/336/ 10.33 H	R= 9.4 R_E	15 - 1976/336/ 15.08 H	R= 1.8 R_E
2 - 1976/335/ 17.00 H	R= 20.0 R_E	9 - 1976/336/ 11.67 H	R= 7.4 R_E	16 - 1976/336/ 13.17 H	R= 1.9 R_E
3 - 1976/335/ 20.00 H	R= 19.4 R_E	10 - 1976/336/ 13.92 H	R= 4.3 R_E	17 - 1976/336/ 15.25 H	R= 2.0 R_E
4 - 1976/335/ 23.50 H	R= 18.1 R_E	11 - 1976/336/ 14.25 H	R= 2.5 R_E	18 - 1976/336/ 15.58 H	R= 2.7 R_E
5 - 1976/336/ 5.33 H	R= 14.5 R_E	12 - 1976/336/ 14.67 H	R= 1.8 R_E	19 - 1976/336/ 16.33 H	R= 4.7 R_E
6 - 1976/336/ 7.83 H	R= 12.3 R_E	13 - 1976/336/ 14.83 H	R= 1.6 R_E	20 - 1976/336/ 20.67 H	R= 10.9 R_E
7 - 1976/336/ 9.17 H	R= 10.8 R_E	14 - 1976/336/ 15.00 H	R= 1.7 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/335 / 8.00H TO1976/337 / 9.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/337/ 9.17H	LAT= 75.9	11 - 1976/338/ 17.00H	LAT= 13.4
2 - 1976/337/ 11.17H	LAT= 77.2	12 - 1976/338/ 17.75H	LAT= -35.7
3 - 1976/337/ 12.67H	LAT= 78.5	13 - 1976/338/ 18.17H	LAT= -77.9
4 - 1976/337/ 14.17H	LAT= 79.6	14 - 1976/338/ 19.25H	LAT= 7.9
5 - 1976/337/ 15.17H	LAT= 80.2	15 - 1976/338/ 20.25H	LAT= 29.2
6 - 1976/337/ 15.67H	LAT= 80.5	16 - 1976/338/ 21.50H	LAT= 41.7
7 - 1976/337/ 18.67H	LAT= 81.7	17 - 1976/338/ 23.25H	LAT= 50.7
8 - 1976/337/ 23.67H	LAT= 81.0	18 - 1976/339/ 1.67H	LAT= 58.7
9 - 1976/338/ 5.17H	LAT= 76.1	19 - 1976/339/ 9.50H	LAT= 72.2
10 - 1976/338/ 15.00H	LAT= 46.7		

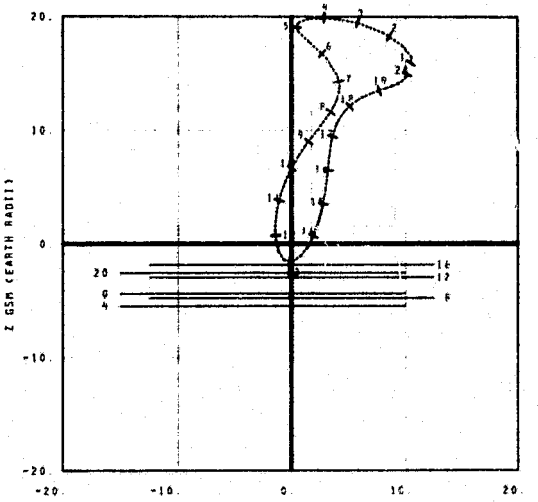
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/337/ 9.00H TO 1976/339/10.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/337/ 9.17H	R= 19.2R_E	11 - 1976/338/ 15.83H	R= 5.8R_E
2 - 1976/337/ 14.17H	R= 20.2R_E	12 - 1976/338/ 17.08H	R= 3.3R_E
3 - 1976/337/ 16.67H	R= 20.3R_E	13 - 1976/338/ 18.17H	R= 1.7R_E
4 - 1976/337/ 19.17H	R= 20.2R_E	14 - 1976/338/ 19.33H	R= 3.9R_E
5 - 1976/337/ 23.67H	R= 19.2R_E	15 - 1976/338/ 20.50H	R= 6.3R_E
6 - 1976/338/ 4.17H	R= 17.4R_E	16 - 1976/338/ 22.17H	R= 8.7R_E
7 - 1976/338/ 7.17H	R= 15.6R_E	17 - 1976/339/ 0.25H	R= 11.3R_E
8 - 1976/338/ 10.17H	R= 13.1R_E	18 - 1976/339/ 3.00H	R= 14.0R_E
9 - 1976/338/ 12.67H	R= 10.5R_E	19 - 1976/339/ 5.83H	R= 16.1R_E
10 - 1976/338/ 14.33H	R= 8.3R_E	20 - 1976/339/ 10.00H	R= 18.3R_E

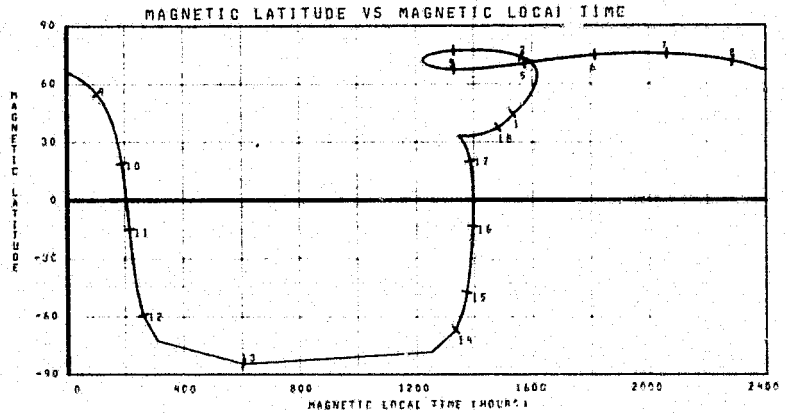
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/337/ 9.00H TO 1976/339/10.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

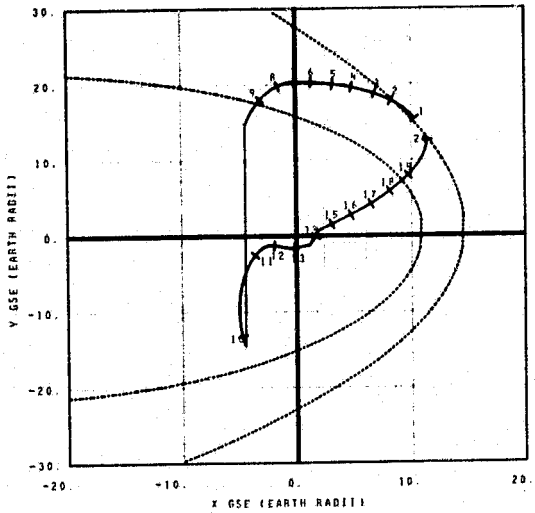
1 - 1976/337/ 9.17H	R= 19.2R_E	8 - 1976/338/ 13.33H	R= 9.6R_E	15 - 1976/338/ 18.50H	R= 2.1R_E
2 - 1976/337/ 17.67H	R= 20.3R_E	9 - 1976/338/ 15.50H	R= 6.3R_E	16 - 1976/338/ 19.00H	R= 3.1R_E
3 - 1976/337/ 20.67H	R= 20.0R_E	10 - 1976/338/ 17.17H	R= 3.2R_E	17 - 1976/338/ 20.50H	R= 4.3R_E
4 - 1976/338/ 3.67H	R= 17.4R_E	11 - 1976/338/ 17.67H	R= 2.1R_E	18 - 1976/339/ 7.83H	R= 17.3R_E
5 - 1976/338/ 7.67H	R= 15.2R_E	12 - 1976/338/ 18.00H	R= 1.7R_E		
6 - 1976/338/ 10.17H	R= 13.1R_E	13 - 1976/338/ 18.17H	R= 1.7R_E		
7 - 1976/338/ 11.83H	R= 11.4R_E	14 - 1976/338/ 18.33H	R= 1.8R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/337/ 9.00H TO1976/339 /10.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/339/ 10.50 H	LAT= 73.3	11 - 1976/340/ 19.75 H	LAT= 26.3
2 - 1976/339/ 14.00 H	LAT= 76.9	12 - 1976/340/ 20.75 H	LAT= -15.6
3 - 1976/339/ 15.50 H	LAT= 78.2	13 - 1976/340/ 21.25 H	LAT= -76.1
4 - 1976/339/ 17.00 H	LAT= 79.3	14 - 1976/340/ 21.92 H	LAT= -72.1
5 - 1976/339/ 18.00 H	LAT= 80.0	15 - 1976/340/ 22.33 H	LAT= 3.5
6 - 1976/339/ 19.00 H	LAT= 80.6	16 - 1976/340/ 23.33 H	LAT= 27.0
7 - 1976/339/ 20.00 H	LAT= 81.1	17 - 1976/341/ 0.47 H	LAT= 48.8
8 - 1976/340/ 0.50 H	LAT= 81.9	18 - 1976/341/ 2.33 H	LAT= 56.1
9 - 1976/340/ 5.50 H	LAT= 79.2	19 - 1976/341/ 4.67 H	LAT= 58.1
10 - 1976/340/ 12.33 H	LAT= 69.7	20 - 1976/341/ 10.50 H	LAT= 59.2

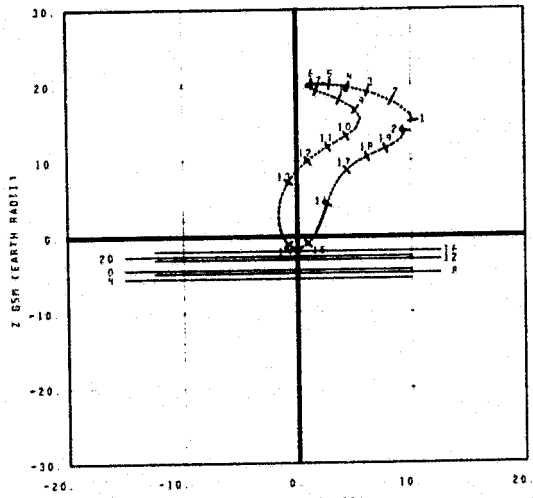
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/339/10.00H TO 1976/341/11.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/339/ 10.50 H	R= 18.5 R_E	11 - 1976/340/ 13.33 H	R= 13.1 R_E
2 - 1976/339/ 14.50 H	R= 19.8 R_E	12 - 1976/340/ 15.17 H	R= 11.3 R_E
3 - 1976/339/ 16.50 H	R= 20.1 R_E	13 - 1976/340/ 17.17 H	R= 8.8 R_E
4 - 1976/339/ 18.00 H	R= 20.3 R_E	14 - 1976/340/ 20.92 H	R= 2.0 R_E
5 - 1976/339/ 19.50 H	R= 20.3 R_E	15 - 1976/340/ 21.83 H	R= 2.3 R_E
6 - 1976/339/ 21.50 H	R= 20.3 R_E	16 - 1976/341/ 0.12 H	R= 6.6 R_E
7 - 1976/340/ 2.00 H	R= 19.5 R_E	17 - 1976/341/ 3.25 H	R= 11.1 R_E
8 - 1976/340/ 4.50 H	R= 18.7 R_E	18 - 1976/341/ 5.33 H	R= 13.2 R_E
9 - 1976/340/ 6.50 H	R= 17.8 R_E	19 - 1976/341/ 7.17 H	R= 14.8 R_E
10 - 1976/340/ 11.50 H	R= 14.7 R_E	20 - 1976/341/ 11.00 H	R= 17.3 R_E

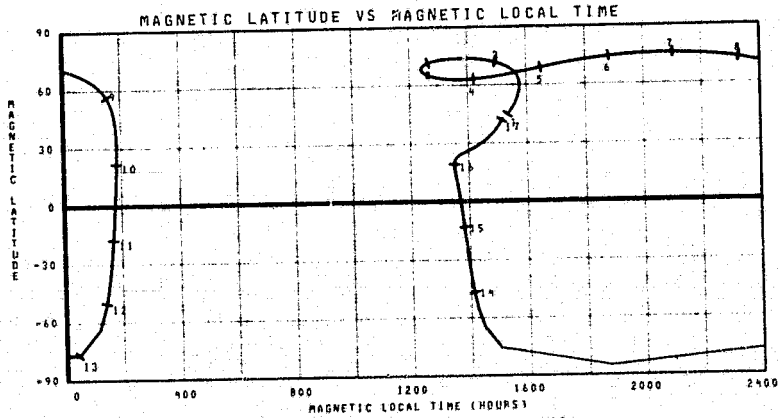
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/339/10.00H TO 1976/341/11.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

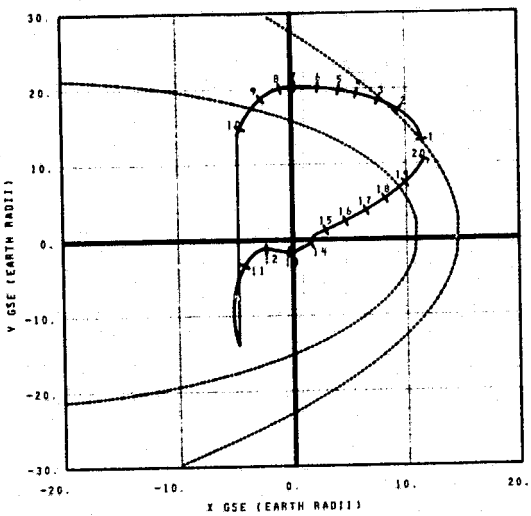
1 - 1976/339/ 10.50 H	R= 18.5 R_E	8 - 1976/340/ 15.50 H	R= 10.9 R_E	15 - 1976/340/ 22.33 H	R= 3.4 R_E
2 - 1976/339/ 18.00 H	R= 20.3 R_E	9 - 1976/340/ 18.50 H	R= 6.8 R_E	16 - 1976/341/ 1.08 H	R= 8.3 R_E
3 - 1976/339/ 22.00 H	R= 20.2 R_E	10 - 1976/340/ 20.33 H	R= 3.2 R_E	17 - 1976/341/ 10.83 H	R= 17.2 R_E
4 - 1976/340/ 5.50 H	R= 18.3 R_E	11 - 1976/340/ 20.92 H	R= 2.0 R_E		
5 - 1976/340/ 9.50 H	R= 16.1 R_E	12 - 1976/340/ 21.17 H	R= 1.7 R_E		
6 - 1976/340/ 12.17 H	R= 14.2 R_E	13 - 1976/340/ 21.33 H	R= 1.6 R_E		
7 - 1976/340/ 13.83 H	R= 12.7 R_E	14 - 1976/340/ 21.75 H	R= 2.2 R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/339/10.00H TO1976/341/11.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/341/	11.17H	LAT=	70.1	11 - 1976/342/	22.50H	LAT=	39.8
2 - 1976/341/	16.67H	LAT=	74.3	12 - 1976/342/	23.83H	LAT=	-6.5
3 - 1976/341/	18.67H	LAT=	78.1	13 - 1976/343/	0.42H	LAT=	-70.2
4 - 1976/341/	20.17H	LAT=	79.2	14 - 1976/343/	0.58H	LAT=	-77.4
5 - 1976/341/	21.17H	LAT=	79.9	15 - 1976/343/	1.42H	LAT=	-1.6
6 - 1976/341/	22.17H	LAT=	80.3	16 - 1976/343/	2.42H	LAT=	25.3
7 - 1976/341/	23.17H	LAT=	81.0	17 - 1976/343/	3.75H	LAT=	39.8
8 - 1976/342/	2.17H	LAT=	81.9	18 - 1976/343/	5.33H	LAT=	49.2
9 - 1976/342/	7.17H	LAT=	80.5	19 - 1976/343/	7.67H	LAT=	57.3
10 - 1976/342/	13.67H	LAT=	73.2	20 - 1976/343/	11.67H	LAT=	66.0

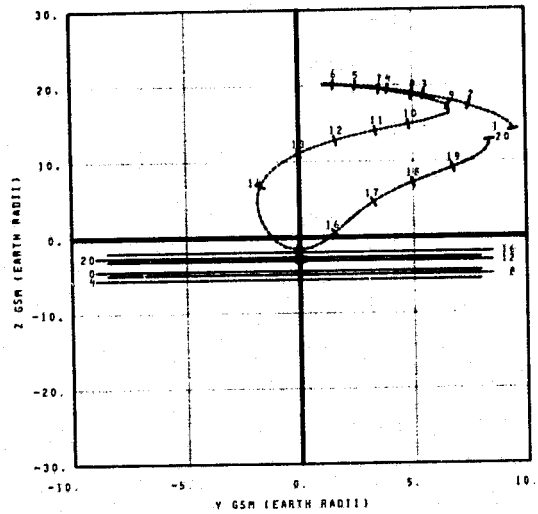
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/341/11.00H TO 1976/343/12.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/341/	11.17H	R=	17.9RE	11 - 1976/342/	19.17H	R=	15.1RE
2 - 1976/341/	15.17H	R=	19.1RE	12 - 1976/342/	19.83H	R=	13.8RE
3 - 1976/341/	17.17H	R=	19.6RE	13 - 1976/342/	17.50H	R=	12.2RE
4 - 1976/341/	18.67H	R=	20.0RE	14 - 1976/342/	20.50H	R=	8.6RE
5 - 1976/341/	20.17H	R=	20.2RE	15 - 1976/343/	0.50H	R=	1.6RE
6 - 1976/342/	1.17H	R=	20.2RE	16 - 1976/343/	1.67H	R=	3.7RE
7 - 1976/342/	3.67H	R=	19.9RE	17 - 1976/343/	3.75H	R=	7.5RE
8 - 1976/342/	5.17H	R=	19.5RE	18 - 1976/343/	5.75H	R=	10.3RE
9 - 1976/342/	7.67H	R=	18.7RE	19 - 1976/343/	7.83H	R=	12.5RE
10 - 1976/342/	12.67H	R=	16.2RE	20 - 1976/343/	12.00H	R=	14.0RE

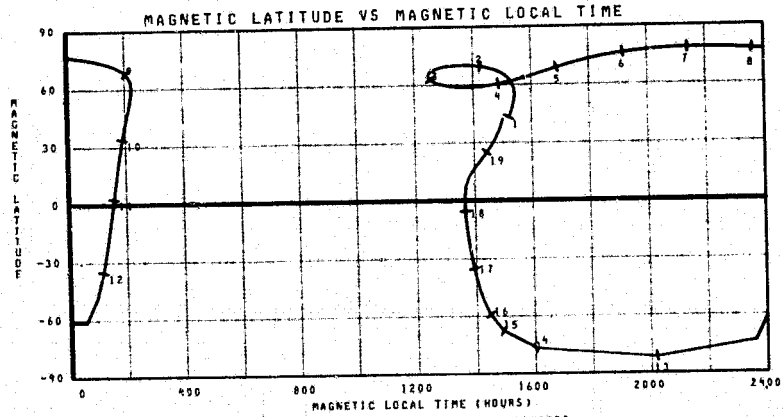
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/341/11.00H TO 1976/343/12.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

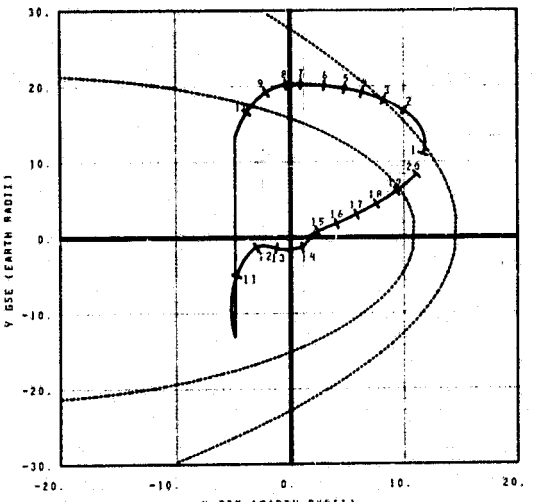
1 - 1976/341/	11.17H	R=	17.9RE	8 - 1976/342/	17.17H	R=	12.5RE	15 - 1976/343/	0.83H	R=	1.9RE
2 - 1976/341/	18.67H	R=	20.0RE	9 - 1976/342/	20.33H	R=	8.4RE	16 - 1976/343/	0.92H	R=	2.1RE
3 - 1976/342/	0.67H	R=	20.3RE	10 - 1976/342/	23.92H	R=	3.9RE	17 - 1976/343/	1.25H	R=	3.0RE
4 - 1976/342/	7.17H	R=	18.9RE	11 - 1976/342/	29.00H	R=	2.3RE	18 - 1976/343/	2.28H	R=	4.9RE
5 - 1976/342/	11.17H	R=	17.1RE	12 - 1976/343/	0.33H	R=	1.7RE	19 - 1976/343/	7.83H	R=	12.5RE
6 - 1976/342/	14.00H	R=	15.3RE	13 - 1976/343/	0.67H	R=	1.7RE				
7 - 1976/342/	15.67H	R=	13.9RE	14 - 1976/343/	0.75H	R=	1.8RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/341/11.00H TO1976/343/12.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/343/ 12.17H	LAT= 66.9	11 - 1976/345/ 0.83H	LAT= 45.2		
2 - 1976/343/ 20.00H	LAT= 76.4	12 - 1976/345/ 2.75H	LAT= 9.0		
3 - 1976/343/ 22.00H	LAT= 78.1	13 - 1976/345/ 3.42H	LAT= -40.6		
4 - 1976/343/ 23.50H	LAT= 79.3	14 - 1976/345/ 3.75H	LAT= -81.4		
5 - 1976/344/ 0.50H	LAT= 80.0	15 - 1976/345/ 4.33H	LAT= -17.0		
6 - 1976/344/ 1.50H	LAT= 80.6	16 - 1976/345/ 5.25H	LAT= 18.0		
7 - 1976/344/ 2.50H	LAT= 81.1	17 - 1976/345/ 6.40H	LAT= 39.9		
8 - 1976/344/ 4.00H	LAT= 81.6	18 - 1976/345/ 7.83H	LAT= 65.4		
9 - 1976/344/ 9.00H	LAT= 81.3	19 - 1976/345/ 9.75H	LAT= 53.9		
10 - 1976/344/ 14.50H	LAT= 76.7	20 - 1976/345/ 12.50H	LAT= 61.4		

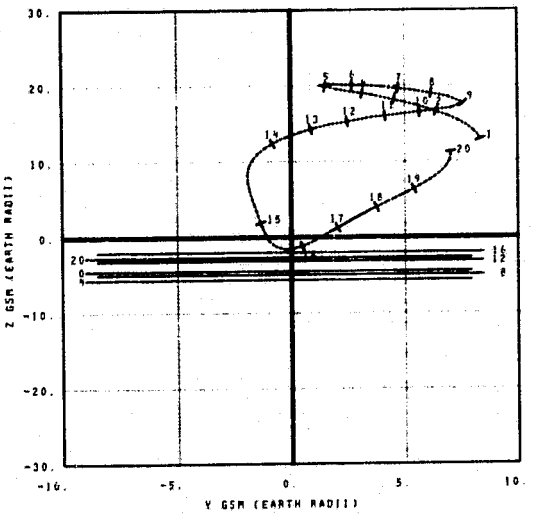
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/343/12.00H TO 1976/345/13.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/343/ 12.17H	R= 16.1RE	11 - 1976/344/ 14.50H	R= 17.0RE
2 - 1976/343/ 16.00H	R= 18.2RE	12 - 1976/344/ 16.00H	R= 16.1RE
3 - 1976/343/ 18.00H	R= 19.0RE	13 - 1976/344/ 17.50H	R= 15.0RE
4 - 1976/343/ 19.50H	R= 19.4RE	14 - 1976/344/ 19.50H	R= 13.4RE
5 - 1976/343/ 22.00H	R= 20.0RE	15 - 1976/345/ 2.17H	R= 4.5RE
6 - 1976/344/ 2.50H	R= 20.3RE	16 - 1976/345/ 4.17H	R= 2.2RE
7 - 1976/344/ 4.50H	R= 20.2RE	17 - 1976/345/ 5.33H	R= 4.6RE
8 - 1976/344/ 6.00H	R= 20.0RE	18 - 1976/345/ 6.92H	R= 7.4RE
9 - 1976/344/ 9.00H	R= 19.3RE	19 - 1976/345/ 8.75H	R= 10.8RE
10 - 1976/344/ 13.00H	R= 17.8RE	20 - 1976/345/ 13.00H	R= 14.3RE

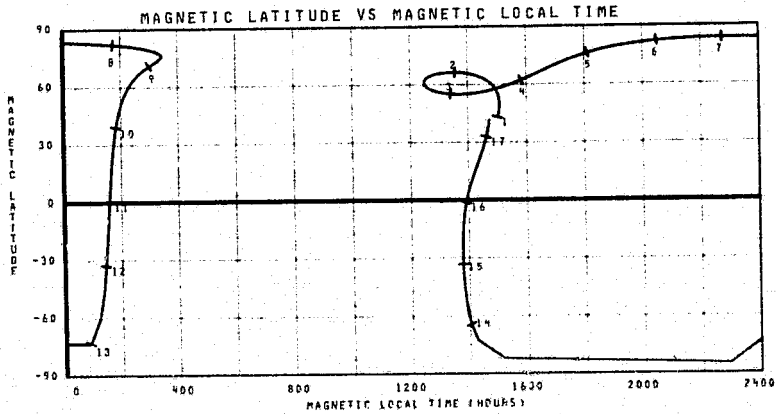
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/343/12.00H TO 1976/345/13.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

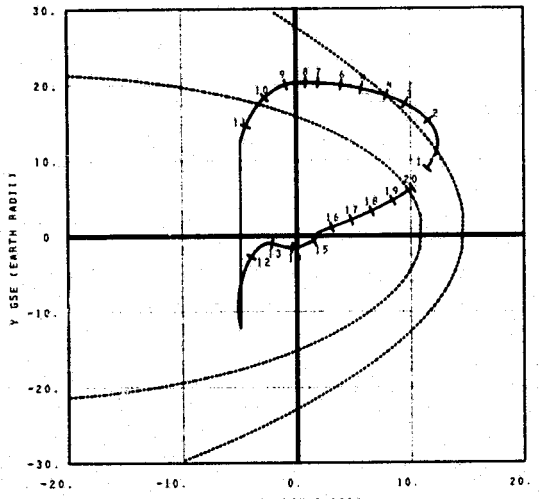
1 - 1976/343/ 12.17H	R= 16.1RE	8 - 1976/344/ 19.50H	R= 13.4RE	15 - 1976/345/ 4.67H	R= 3.2RE
2 - 1976/343/ 19.50H	R= 19.4RE	9 - 1976/345/ 0.50H	R= 7.4RE	16 - 1976/345/ 7.22H	R= 6.3RE
3 - 1976/344/ 4.00H	R= 20.3RE	10 - 1976/345/ 2.75H	R= 3.2RE	17 - 1976/345/ 11.33H	R= 12.8RE
4 - 1976/344/ 10.00H	R= 19.0RE	11 - 1976/345/ 3.33H	R= 2.0RE		
5 - 1976/344/ 14.50H	R= 17.0RE	12 - 1976/345/ 3.58H	R= 1.7RE		
6 - 1976/344/ 16.67H	R= 15.6RE	13 - 1976/345/ 3.83H	R= 1.7RE		
7 - 1976/344/ 17.83H	R= 14.8RE	14 - 1976/345/ 4.17H	R= 2.2RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/343 /12.00H TO1976/345 /13.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/345/ 13.17H	LAT= 62.8	11 - 1976/346/ 20.50H	LAT= 72.7
2 - 1976/345/ 21.67H	LAT= 74.8	12 - 1976/347/ 5.17H	LAT= 31.0
3 - 1976/346/ 0.67H	LAT= 77.6	13 - 1976/347/ 6.33H	LAT= -11.6
4 - 1976/346/ 2.17H	LAT= 78.8	14 - 1976/347/ 6.83H	LAT= -69.5
5 - 1976/346/ 3.67H	LAT= 79.9	15 - 1976/347/ 7.00H	LAT= -78.0
6 - 1976/346/ 4.67H	LAT= 80.5	16 - 1976/347/ 7.92H	LAT= 2.0
7 - 1976/346/ 5.67H	LAT= 81.0	17 - 1976/347/ 8.87H	LAT= 25.6
8 - 1976/346/ 6.17H	LAT= 81.2	18 - 1976/347/ 10.08H	LAT= 39.1
9 - 1976/346/ 9.17H	LAT= 82.0	19 - 1976/347/ 11.67H	LAT= 48.8
10 - 1976/346/ 14.67H	LAT= 79.8	20 - 1976/347/ 13.67H	LAT= 56.2

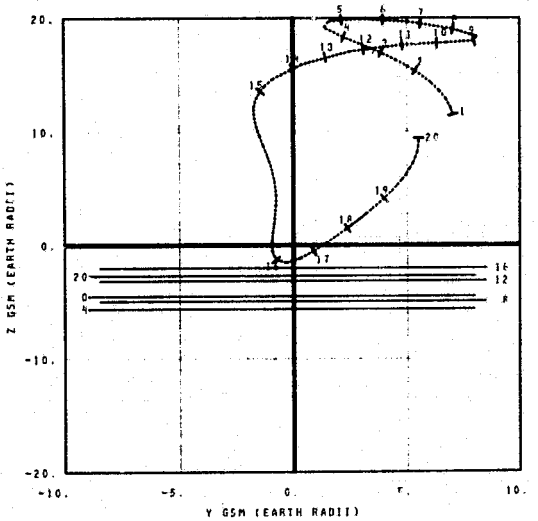
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/345/13.00H TO 1976/347/14.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/345/ 13.17H	R= 14.5R_E	11 - 1976/346/ 14.67H	R= 18.5R_E
2 - 1976/345/ 14.67H	R= 14.9R_E	12 - 1976/346/ 16.17H	R= 17.8R_E
3 - 1976/345/ 18.50H	R= 17.6R_E	13 - 1976/346/ 17.67H	R= 17.0R_E
4 - 1976/345/ 20.67H	R= 18.8R_E	14 - 1976/346/ 19.17H	R= 16.1R_E
5 - 1976/346/ 1.67H	R= 20.1R_E	15 - 1976/346/ 21.50H	R= 14.9R_E
6 - 1976/346/ 3.67H	R= 20.3R_E	16 - 1976/347/ 6.75H	R= 1.7R_E
7 - 1976/346/ 5.17H	R= 20.3R_E	17 - 1976/347/ 7.75H	R= 3.6R_E
8 - 1976/346/ 6.67H	R= 20.3R_E	18 - 1976/347/ 8.78H	R= 5.1R_E
9 - 1976/346/ 10.67H	R= 19.7R_E	19 - 1976/347/ 10.33H	R= 7.8R_E
10 - 1976/346/ 13.17H	R= 19.0R_E	20 - 1976/347/ 14.00H	R= 12.3R_E

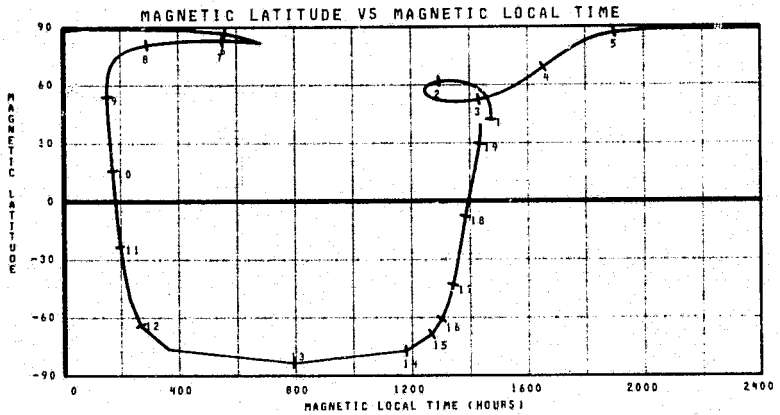
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/345/13.00H TO 1976/347/14.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

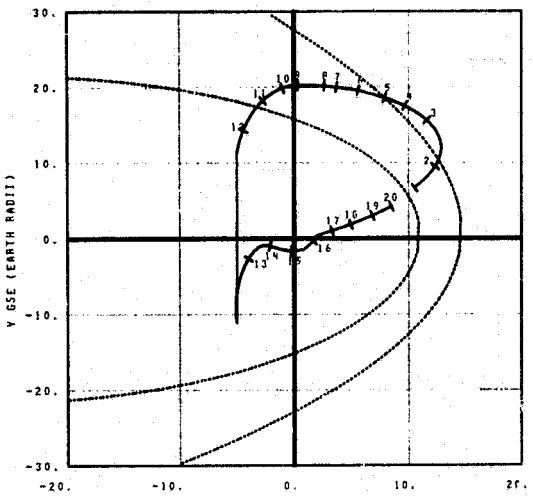
1 - 1976/345/ 13.17H	R= 14.5R_E	8 - 1976/346/ 3.67H	R= 7.5R_E	15 - 1976/347/ 7.33H	R= 2.1R_E
2 - 1976/345/ 20.67H	R= 18.8R_E	9 - 1976/347/ 5.67H	R= 3.9R_E	16 - 1976/347/ 7.92H	R= 2.2R_E
3 - 1976/346/ 6.67H	R= 20.3R_E	10 - 1976/347/ 6.42H	R= 2.3R_E	17 - 1976/347/ 7.67H	R= 2.0R_E
4 - 1976/346/ 13.17H	R= 19.0R_E	11 - 1976/347/ 6.75H	R= 1.7R_E	18 - 1976/347/ 8.75H	R= 1.8R_E
5 - 1976/346/ 18.17H	R= 16.8R_E	12 - 1976/347/ 7.00H	R= 1.6R_E	19 - 1976/347/ 12.42H	R= 10.6R_E
6 - 1976/346/ 20.33H	R= 15.3R_E	13 - 1976/347/ 7.17H	R= 1.0R_E		
7 - 1976/347/ 2.33H	R= 9.4R_E	14 - 1976/347/ 7.25H	R= 1.9R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/345 /13.00H TO1976/347 /14.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/347/ 14.17H	LAT= 57.6	11 - 1976/348/ 16.00H	LAT= 79.7
2 - 1976/347/ 17.83H	LAT= 65.5	12 - 1976/348/ 24.00H	LAT= 72.3
3 - 1976/348/ 2.00H	LAT= 75.9	13 - 1976/349/ 8.42H	LAT= 30.4
4 - 1976/348/ 4.50H	LAT= 78.1	14 - 1976/349/ 9.58H	LAT= -14.5
5 - 1976/348/ 6.00H	LAT= 79.2	15 - 1976/349/ 10.08H	LAT= -75.1
6 - 1976/348/ 7.50H	LAT= 80.2	16 - 1976/349/ 10.25H	LAT= -72.8
7 - 1976/348/ 8.50H	LAT= 80.8	17 - 1976/349/ 11.17H	LAT= 3.5
8 - 1976/348/ 9.00H	LAT= 81.0	18 - 1976/349/ 12.07H	LAT= 25.9
9 - 1976/348/ 10.00H	LAT= 81.5	19 - 1976/349/ 13.33H	LAT= 39.5
10 - 1976/348/ 13.00H	LAT= 81.9	20 - 1976/349/ 14.75H	LAT= 48.1

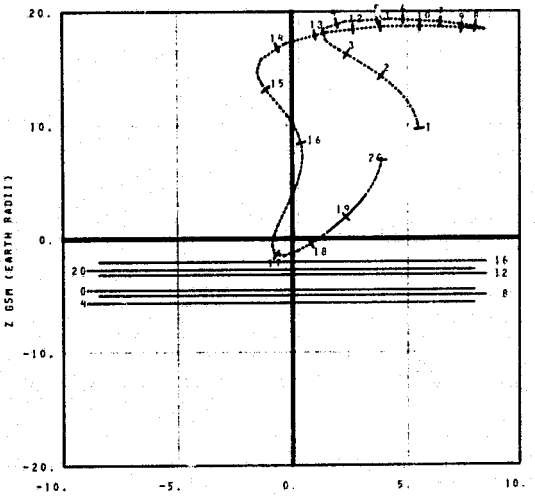
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/347/14.00H TO 1976/349/15.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/347/ 14.17H	R= 12.5RE	11 - 1976/348/ 16.00H	R= 19.2RE
2 - 1976/347/ 18.00H	R= 15.7RE	12 - 1976/348/ 17.00H	R= 18.8RE
3 - 1976/347/ 20.17H	R= 17.0RE	13 - 1976/348/ 18.50H	R= 18.2RE
4 - 1976/348/ 1.50H	R= 19.3RE	14 - 1976/348/ 20.50H	R= 17.5RE
5 - 1976/348/ 3.50H	R= 19.8RE	15 - 1976/349/ 1.17H	R= 14.1RE
6 - 1976/348/ 4.50H	R= 20.0RE	16 - 1976/349/ 5.17H	R= 9.9RE
7 - 1976/348/ 6.00H	R= 20.2RE	17 - 1976/349/ 10.08H	R= 1.6RE
8 - 1976/348/ 8.00H	R= 20.3RE	18 - 1976/349/ 11.00H	R= 3.0RE
9 - 1976/348/ 12.50H	R= 20.0RE	19 - 1976/349/ 12.15H	R= 5.4RE
10 - 1976/348/ 14.00H	R= 19.6RE	20 - 1976/349/ 15.00H	R= 9.8RE

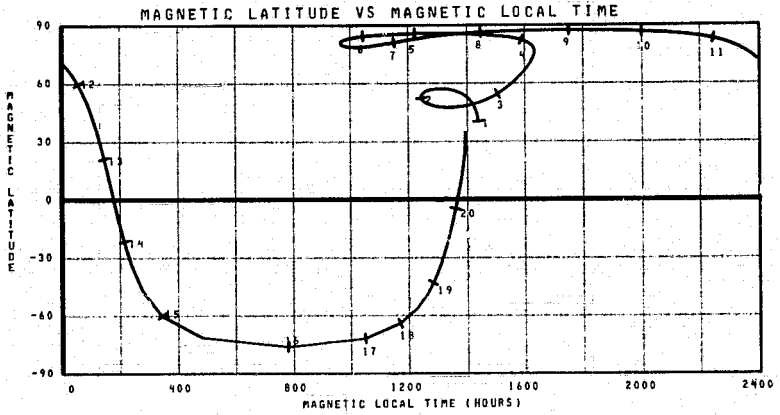
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/347/14.00H TO 1976/349/15.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

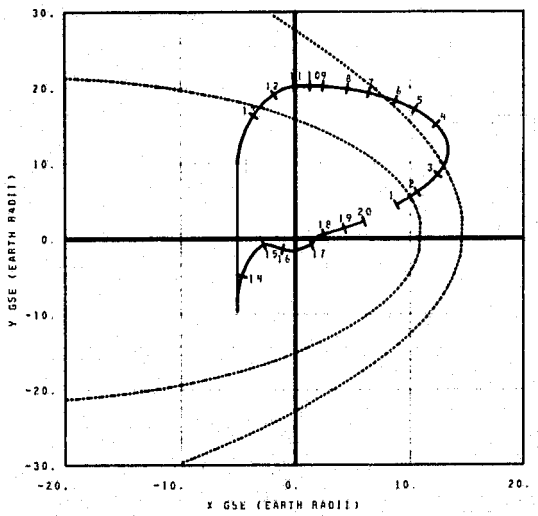
1 - 1976/347/ 14.17H	R= 12.5RE	8 - 1976/349/ 5.17H	R= 9.9RE	15 - 1976/349/ 10.17H	R= 1.6RE
2 - 1976/347/ 24.00H	R= 18.8RE	9 - 1976/349/ 5.67H	R= 9.3RE	16 - 1976/349/ 10.33H	R= 1.7RE
3 - 1976/348/ 9.50H	R= 20.3RE	10 - 1976/349/ 6.00H	R= 8.8RE	17 - 1976/349/ 10.92H	R= 1.9RE
4 - 1976/348/ 17.50H	R= 18.6RE	11 - 1976/349/ 6.67H	R= 7.8RE	18 - 1976/349/ 10.58H	R= 2.0RE
5 - 1976/348/ 19.50H	R= 17.8RE	12 - 1976/349/ 8.50H	R= 4.7RE	19 - 1976/349/ 10.75H	R= 2.3RE
6 - 1976/348/ 20.50H	R= 17.3RE	13 - 1976/349/ 9.50H	R= 2.5RE	20 - 1976/349/ 11.70H	R= 4.5RE
7 - 1976/349/ 3.33H	R= 12.0RE	14 - 1976/349/ 9.92H	R= 1.6RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/347 /14.00H TO1976/349 /15.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/349/ 15.08H	LAT= 49.7	11 - 1976/350/ 19.17H	LAT= 81.7
2 - 1976/349/ 17.17H	LAT= 57.0	12 - 1976/350/ 19.17H	LAT= 81.1
3 - 1976/349/ 20.33H	LAT= 64.2	13 - 1976/351/ 0.67H	LAT= 76.2
4 - 1976/350/ 5.17H	LAT= 75.8	14 - 1976/351/ 10.50H	LAT= 45.2
5 - 1976/350/ 7.67H	LAT= 78.0	15 - 1976/351/ 12.50H	LAT= 4.0
6 - 1976/350/ 9.17H	LAT= 79.2	16 - 1976/351/ 13.08H	LAT= -44.8
7 - 1976/350/ 10.67H	LAT= 80.2	17 - 1976/351/ 13.42H	LAT= -78.4
8 - 1976/350/ 11.67H	LAT= 80.7	18 - 1976/351/ 14.00H	LAT= -15.2
9 - 1976/350/ 12.67H	LAT= 81.2	19 - 1976/351/ 14.92H	LAT= 18.8
10 - 1976/350/ 13.17H	LAT= 81.4	20 - 1976/351/ 15.95H	LAT= 34.0

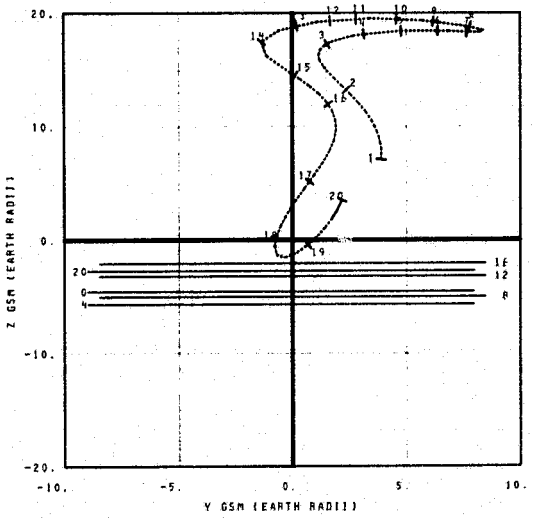
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/349/15.00H TO 1976/351/16.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/349/ 15.08H	R= 9.9R_E	11 - 1976/350/ 17.17H	R= 19.7R_E
2 - 1976/349/ 17.67H	R= 14.5R_E	12 - 1976/350/ 18.17H	R= 19.5R_E
3 - 1976/350/ 1.00H	R= 17.9R_E	13 - 1976/350/ 19.67H	R= 19.0R_E
4 - 1976/350/ 3.17H	R= 18.8R_E	14 - 1976/350/ 22.67H	R= 17.6R_E
5 - 1976/350/ 4.67H	R= 19.3R_E	15 - 1976/351/ 3.00H	R= 15.1R_E
6 - 1976/350/ 6.17H	R= 19.7R_E	16 - 1976/351/ 5.50H	R= 13.0R_E
7 - 1976/350/ 7.67H	R= 20.0R_E	17 - 1976/351/ 10.33H	R= 7.1R_E
8 - 1976/350/ 12.17H	R= 20.3R_E	18 - 1976/351/ 12.58H	R= 2.6R_E
9 - 1976/350/ 14.17H	R= 20.2R_E	19 - 1976/351/ 14.17H	R= 2.9R_E
10 - 1976/350/ 15.67H	R= 20.0R_E	20 - 1976/351/ 15.98H	R= 6.5R_E

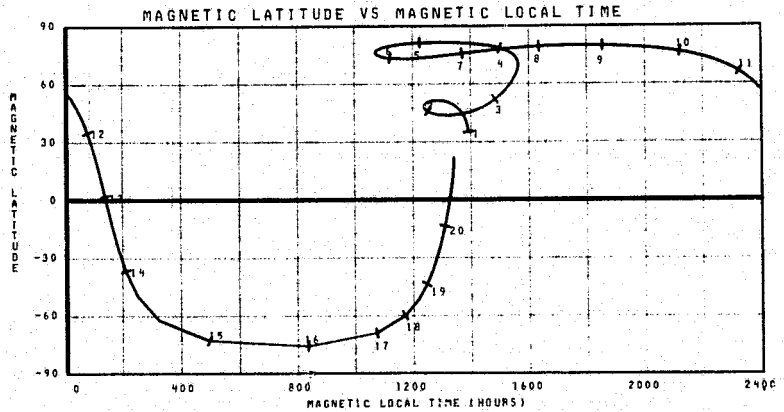
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/349/15.00H TO 1976/351/16.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

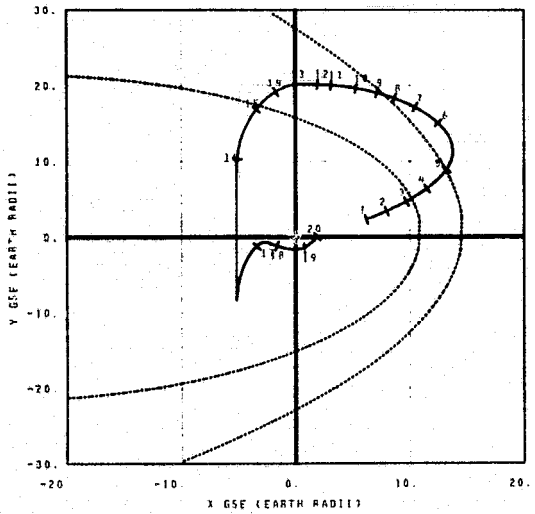
1 - 1976/349/ 15.08H	R= 9.9R_E	8 - 1976/351/ 7.17H	R= 11.3R_E	15 - 1976/351/ 13.92H	R= 1.6R_E
2 - 1976/350/ 1.33H	R= 18.0R_E	9 - 1976/351/ 8.17H	R= 10.2R_E	16 - 1976/351/ 13.58H	R= 1.7R_E
3 - 1976/350/ 4.67H	R= 20.3R_E	10 - 1976/351/ 9.33H	R= 6.6R_E	17 - 1976/351/ 13.58H	R= 1.8R_E
4 - 1976/350/ 17.17H	R= 19.7R_E	11 - 1976/351/ 10.67H	R= 6.3R_E	18 - 1976/351/ 13.67H	R= 1.9R_E
5 - 1976/350/ 19.67H	R= 19.0R_E	12 - 1976/351/ 12.25H	R= 3.3R_E	19 - 1976/351/ 13.83H	R= 2.2R_E
6 - 1976/351/ 1.17H	R= 16.9R_E	13 - 1976/351/ 12.83H	R= 2.3R_E	20 - 1976/351/ 14.32H	R= 3.5R_E
7 - 1976/351/ 5.17H	R= 13.4R_E	14 - 1976/351/ 13.17H	R= 1.7R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/349 /15.00H TO1976/351 /16.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/351/ 16.00H	LAT= 34.6	11 - 1976/352/ 16.00H	LAT= 81.3		
2 - 1976/351/ 17.33H	LAT= 44.8	12 - 1976/352/ 16.50H	LAT= 81.4		
3 - 1976/351/ 19.00H	LAT= 52.5	13 - 1976/352/ 17.50H	LAT= 81.7		
4 - 1976/351/ 21.33H	LAT= 59.5	14 - 1976/352/ 22.00H	LAT= 81.3		
5 - 1976/352/ 0.83H	LAT= 66.4	15 - 1976/353/ 3.00H	LAT= 77.3		
6 - 1976/352/ 9.01H	LAT= 76.3	16 - 1976/353/ 10.17H	LAT= 63.7		
7 - 1976/352/ 11.51H	LAT= 78.5	17 - 1976/353/ 15.42H	LAT= 15.7		
8 - 1976/352/ 13.01H	LAT= 79.6	18 - 1976/353/ 16.17H	LAT= -30.3		
9 - 1976/352/ 14.83H	LAT= 80.2	19 - 1976/353/ 16.58H	LAT= -81.7		
10 - 1976/352/ 15.00H	LAT= 80.8	20 - 1976/353/ 16.83H	LAT= -49.5		

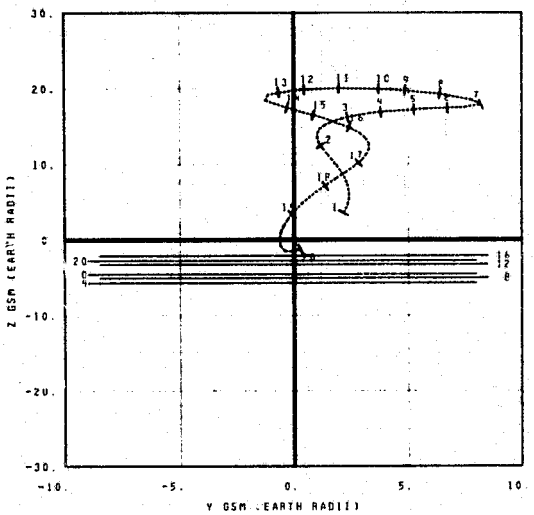
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/351/16.00H TO 1976/353/17.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/351/ 16.00H	R= 6.5R_E	11 - 1976/352/ 18.00H	R= 20.1R_E
2 - 1976/351/ 22.00H	R= 13.8R_E	12 - 1976/352/ 19.50H	R= 19.9R_E
3 - 1976/352/ 2.67H	R= 17.1R_E	13 - 1976/352/ 21.00H	R= 19.6R_E
4 - 1976/352/ 4.17H	R= 17.9R_E	14 - 1976/353/ 2.00H	R= 17.7R_E
5 - 1976/352/ 5.50H	R= 18.5R_E	15 - 1976/353/ 3.50H	R= 16.9R_E
6 - 1976/352/ 7.00H	R= 19.0R_E	16 - 1976/353/ 5.50H	R= 15.7R_E
7 - 1976/352/ 10.00H	R= 19.8R_E	17 - 1976/353/ 10.00H	R= 11.7R_E
8 - 1976/352/ 14.00H	R= 20.3R_E	18 - 1976/353/ 12.33H	R= 8.9R_E
9 - 1976/352/ 15.50H	R= 20.3R_E	19 - 1976/353/ 14.42H	R= 5.6R_E
10 - 1976/352/ 16.50H	R= 20.3R_E	20 - 1976/353/ 17.00H	R= 2.2R_E

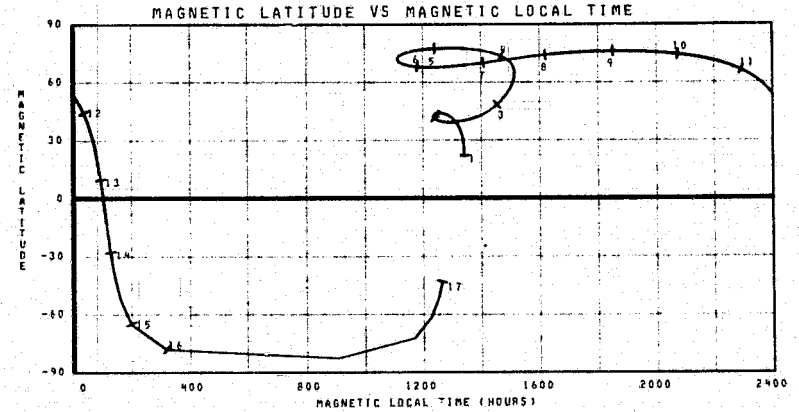
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/351/16.00H TO 1976/353/17.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

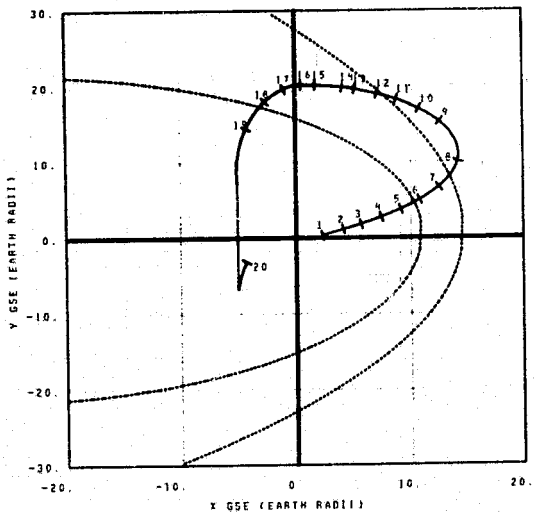
1 - 1976/351/ 16.00H	R= 6.5R_E	8 - 1976/353/ 8.33H	R= 13.9R_E	15 - 1976/353/ 16.50H	R= 1.4R_E
2 - 1976/352/ 0.67H	R= 15.0R_E	9 - 1976/353/ 10.00H	R= 11.7R_E	16 - 1976/353/ 16.58H	R= 1.4R_E
3 - 1976/352/ 9.50H	R= 19.7R_E	10 - 1976/353/ 11.33H	R= 10.2R_E	17 - 1976/353/ 17.00H	R= 2.2R_E
4 - 1976/352/ 16.50H	R= 20.3R_E	11 - 1976/353/ 13.00H	R= 8.0R_E		
5 - 1976/352/ 19.50H	R= 19.9R_E	12 - 1976/353/ 14.03H	R= 4.9R_E		
6 - 1976/353/ 2.00H	R= 17.7R_E	13 - 1976/353/ 15.03H	R= 2.7R_E		
7 - 1976/353/ 6.00H	R= 15.3R_E	14 - 1976/353/ 16.25H	R= 1.9R_E		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/351 /16.00H TO1976/353 /17.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/353/ 17.08 H	LAT= -24.2	11 - 1976/354/ 16.67 H	LAT= 79.9
2 - 1976/353/ 18.00 H	LAT= 16.0	12 - 1976/354/ 17.67 H	LAT= 80.5
3 - 1976/353/ 18.88 H	LAT= 30.9	13 - 1976/354/ 18.67 H	LAT= 81.0
4 - 1976/353/ 20.08 H	LAT= 41.8	14 - 1976/354/ 19.17 H	LAT= 81.2
5 - 1976/353/ 21.50 H	LAT= 49.6	15 - 1976/354/ 20.17 H	LAT= 81.6
6 - 1976/353/ 23.25 H	LAT= 55.9	16 - 1976/354/ 20.67 H	LAT= 81.7
7 - 1976/354/ 1.67 H	LAT= 62.0	17 - 1976/354/ 23.67 H	LAT= 81.8
8 - 1976/354/ 6.50 H	LAT= 70.0	18 - 1976/355/ 4.17 H	LAT= 79.4
9 - 1976/354/ 13.17 H	LAT= 77.2	19 - 1976/355/ 9.50 H	LAT= 72.7
10 - 1976/354/ 15.17 H	LAT= 78.8	20 - 1976/355/ 17.75 H	LAT= 35.3

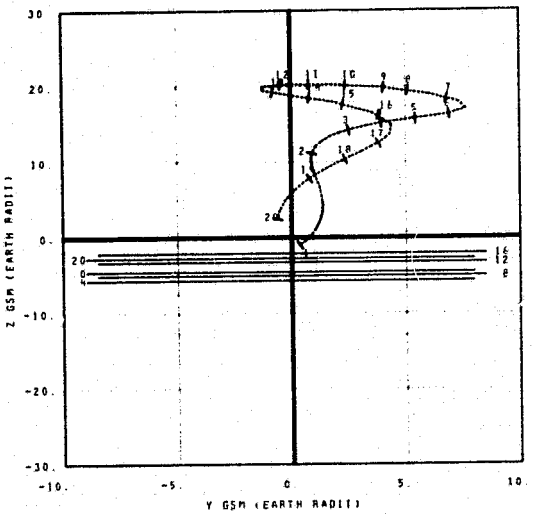
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/353/17.00H TO 1976/355/18.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/353/ 17.08 H	R= 2.3 RE	11 - 1976/354/ 19.17 H	R= 20.3 RE
2 - 1976/354/ 0.00 H	R= 12.7 RE	12 - 1976/354/ 20.67 H	R= 20.2 RE
3 - 1976/354/ 3.33 H	R= 15.5 RE	13 - 1976/355/ 1.17 H	R= 19.3 RE
4 - 1976/354/ 4.83 H	R= 16.5 RE	14 - 1976/355/ 3.17 H	R= 18.4 RE
5 - 1976/354/ 6.33 H	R= 17.3 RE	15 - 1976/355/ 4.67 H	R= 18.0 RE
6 - 1976/354/ 8.17 H	R= 18.2 RE	16 - 1976/355/ 6.67 H	R= 16.9 RE
7 - 1976/354/ 13.17 H	R= 19.8 RE	17 - 1976/355/ 11.00 H	R= 13.9 RE
8 - 1976/354/ 15.17 H	R= 20.2 RE	18 - 1976/355/ 13.17 H	R= 11.8 RE
9 - 1976/354/ 16.17 H	R= 20.3 RE	19 - 1976/355/ 15.17 H	R= 9.4 RE
10 - 1976/354/ 17.67 H	R= 20.3 RE	20 - 1976/355/ 18.00 H	R= 4.9 RE

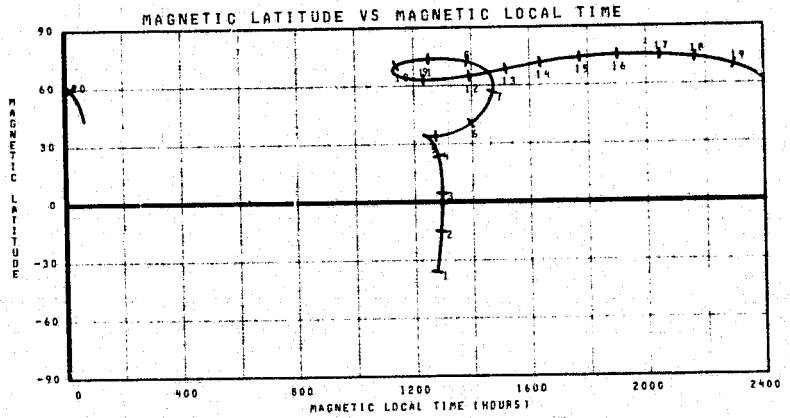
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/353/17.00H TO 1976/355/18.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

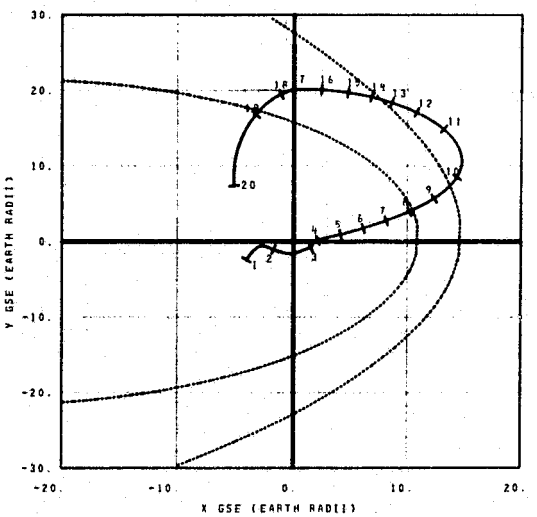
1 - 1976/353/ 17.08 H	R= 2.3 RE	8 - 1976/354/ 17.17 H	R= 20.3 RE	15 - 1976/355/ 11.00 H	R= 13.9 RE
2 - 1976/353/ 17.42 H	R= 3.0 RE	9 - 1976/354/ 19.17 H	R= 20.3 RE	16 - 1976/355/ 12.00 H	R= 13.0 RE
3 - 1976/353/ 18.00 H	R= 4.3 RE	10 - 1976/354/ 21.67 H	R= 20.1 RE	17 - 1976/355/ 13.00 H	R= 12.0 RE
4 - 1976/353/ 19.37 H	R= 6.8 RE	11 - 1976/355/ 3.17 H	R= 18.6 RE	18 - 1976/355/ 13.83 H	R= 11.0 RE
5 - 1976/354/ 3.33 H	R= 15.5 RE	12 - 1976/355/ 6.17 H	R= 17.2 RE	19 - 1976/355/ 15.00 H	R= 9.4 RE
6 - 1976/354/ 8.00 H	R= 18.2 RE	13 - 1976/355/ 8.17 H	R= 14.0 RE	20 - 1976/355/ 16.67 H	R= 7.2 RE
7 - 1976/354/ 12.67 H	R= 19.7 RE	14 - 1976/355/ 9.67 H	R= 14.9 RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/353 /17.00H TO1976/355 /18.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/355/ 18.00H	LAT= 29.5	11 - 1976/356/ 16.50H	LAT= 77.2		
2 - 1976/355/ 19.33H	LAT= -24.7	12 - 1976/356/ 19.00H	LAT= 79.2		
3 - 1976/355/ 19.83H	LAT= -77.1	13 - 1976/356/ 20.50H	LAT= 80.2		
4 - 1976/355/ 20.17H	LAT= -34.9	14 - 1976/356/ 21.50H	LAT= 80.8		
5 - 1976/355/ 21.17H	LAT= 15.0	15 - 1976/356/ 22.50H	LAT= 81.2		
6 - 1976/355/ 22.32H	LAT= 33.9	16 - 1976/356/ 23.50H	LAT= 81.6		
7 - 1976/355/ 23.75H	LAT= 44.6	17 - 1976/357/ 0.50H	LAT= 81.9		
8 - 1976/356/ 1.50H	LAT= 53.0	18 - 1976/357/ 3.50H	LAT= 81.7		
9 - 1976/356/ 4.17H	LAT= 60.3	19 - 1976/357/ 9.50H	LAT= 77.3		
10 - 1976/356/ 8.33H	LAT= 67.9	20 - 1976/357/ 18.67H	LAT= 55.4		

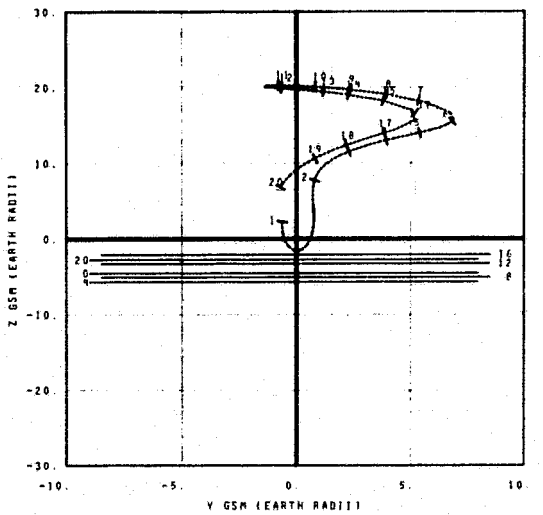
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/355/18.00H TO 1976/357/19.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/355/ 18.00H	R= 9.7R_E	11 - 1976/356/ 21.00H	R= 20.3R_E
2 - 1976/356/ 0.67H	R= 9.9R_E	12 - 1976/357/ 1.50H	R= 20.0R_E
3 - 1976/356/ 3.83H	R= 13.3R_E	13 - 1976/357/ 3.50H	R= 19.5R_E
4 - 1976/356/ 5.67H	R= 14.8R_E	14 - 1976/357/ 6.50H	R= 19.3R_E
5 - 1976/356/ 7.33H	R= 16.0R_E	15 - 1976/357/ 6.00H	R= 18.8R_E
6 - 1976/356/ 10.17H	R= 17.7R_E	16 - 1976/357/ 8.50H	R= 17.7R_E
7 - 1976/356/ 14.50H	R= 19.9R_E	17 - 1976/357/ 12.67H	R= 15.1R_E
8 - 1976/356/ 16.00H	R= 19.7R_E	18 - 1976/357/ 14.67H	R= 13.9R_E
9 - 1976/356/ 17.50H	R= 20.0R_E	19 - 1976/357/ 16.33H	R= 11.8R_E
10 - 1976/356/ 19.00H	R= 20.2R_E	20 - 1976/357/ 19.00H	R= 8.5R_E

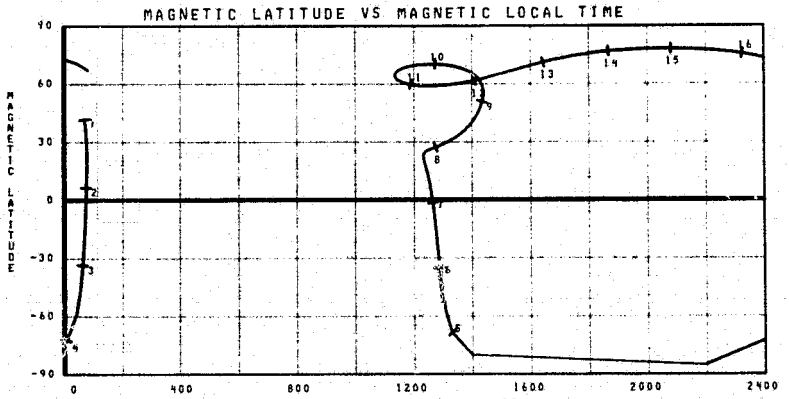
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/355/18.00H TO 1976/357/19.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

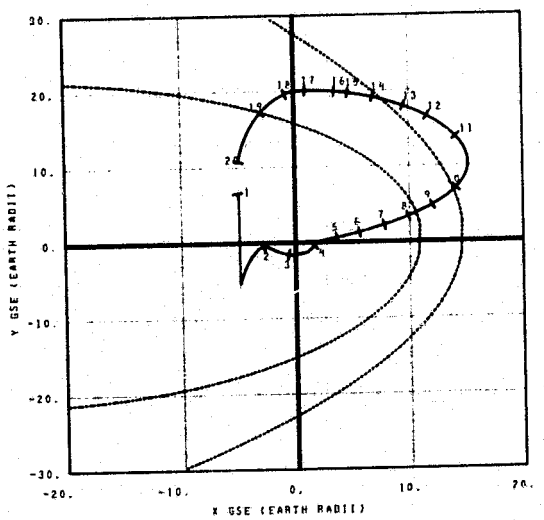
1 - 1976/355/ 18.00H	R= 9.7R_E	8 - 1976/356/ 3.83H	R= 13.3R_E
2 - 1976/355/ 19.08H	R= 2.6R_E	9 - 1976/356/ 18.00H	R= 19.5R_E
3 - 1976/355/ 19.50H	R= 1.8R_E	10 - 1976/356/ 18.50H	R= 20.2R_E
4 - 1976/355/ 19.75H	R= 1.6R_E	11 - 1976/357/ 2.00H	R= 19.9R_E
5 - 1976/355/ 20.00H	R= 1.8R_E	12 - 1976/357/ 7.00H	R= 18.4R_E
6 - 1976/355/ 20.33H	R= 2.4R_E	13 - 1976/357/ 11.00H	R= 16.3R_E
7 - 1976/355/ 21.17H	R= 4.2R_E	14 - 1976/357/ 13.33H	R= 14.6R_E
		15 - 1976/357/ 15.83H	R= 13.3R_E
		16 - 1976/357/ 16.67H	R= 11.5R_E

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/355 /18.00H TO1976/357 /19.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/357/	19.17H	LAT=	52.5	11 - 1976/358/	19.17H	LAT=	76.7
2 - 1976/357/	22.17H	LAT=	0.9	12 - 1976/358/	22.17H	LAT=	79.1
3 - 1976/357/	22.83H	LAT=	-65.5	13 - 1976/358/	23.67H	LAT=	80.1
4 - 1976/357/	23.08H	LAT=	-70.3	14 - 1976/359/	1.17H	LAT=	81.0
5 - 1976/358/	0.08H	LAT=	6.8	15 - 1976/359/	2.17H	LAT=	81.4
6 - 1976/358/	1.13H	LAT=	28.7	16 - 1976/359/	2.67H	LAT=	81.6
7 - 1976/358/	2.58H	LAT=	42.3	17 - 1976/359/	4.67H	LAT=	81.8
8 - 1976/358/	4.33H	LAT=	51.2	18 - 1976/359/	6.17H	LAT=	81.9
9 - 1976/358/	6.67H	LAT=	58.5	19 - 1976/359/	12.17H	LAT=	78.8
10 - 1976/358/	10.17H	LAT=	69.7	20 - 1976/359/	19.50H	LAT=	64.8

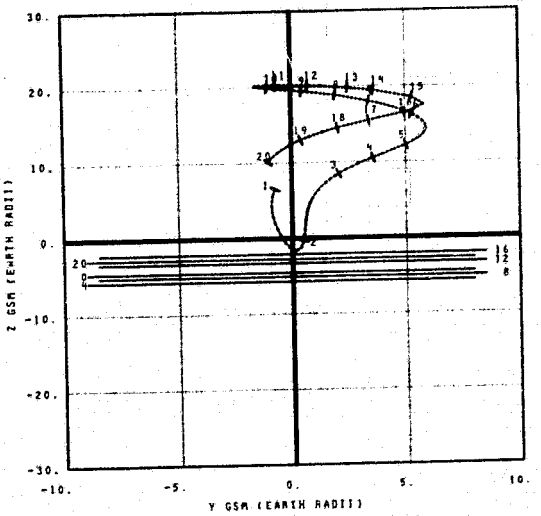
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/357/19.00H TO 1976/359/20.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/357/	19.17H	R=	8.3RE	11 - 1976/359/	1.67H	R=	20.3RE
2 - 1976/357/	23.75H	R=	2.9RE	12 - 1976/359/	3.17H	R=	20.2RE
3 - 1976/358/	4.58H	R=	10.7RE	13 - 1976/359/	4.67H	R=	20.0RE
4 - 1976/358/	6.50H	R=	12.8RE	14 - 1976/359/	5.67H	R=	19.8RE
5 - 1976/358/	8.50H	R=	14.5RE	15 - 1976/359/	7.67H	R=	19.3RE
6 - 1976/358/	13.67H	R=	17.8RE	16 - 1976/359/	12.17H	R=	17.9RE
7 - 1976/358/	16.17H	R=	18.9RE	17 - 1976/359/	14.17H	R=	16.3RE
8 - 1976/358/	17.67H	R=	19.4RE	18 - 1976/359/	15.67H	R=	15.2RE
9 - 1976/358/	19.17H	R=	19.7RE	19 - 1976/359/	17.50H	R=	13.8RE
10 - 1976/358/	21.17H	R=	20.1RE	20 - 1976/359/	20.00H	R=	11.3RE

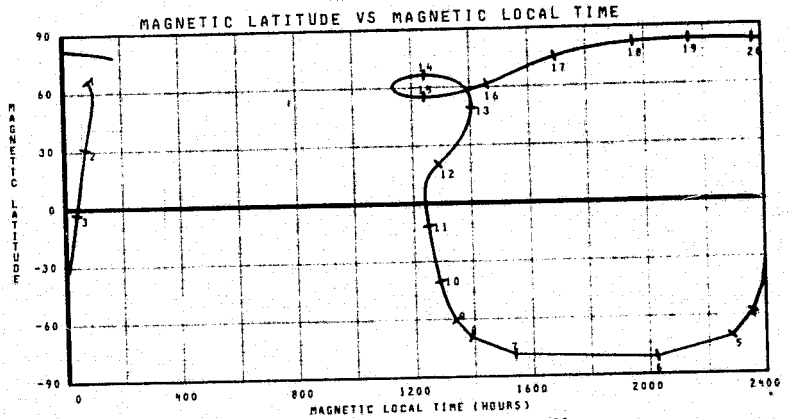
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/357/19.00H TO 1976/359/20.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

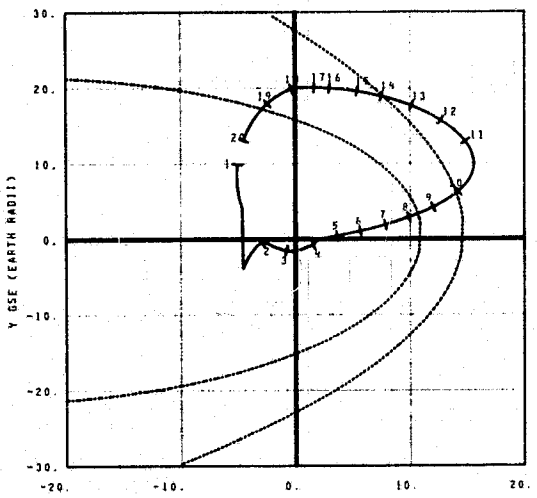
1 - 1976/357/	19.17H	R=	8.3RE	8 - 1976/357/	23.25H	R=	1.9RE	15 - 1976/359/	3.67H	R=	20.1RE
2 - 1976/357/	21.92H	R=	3.4RE	9 - 1976/357/	23.33H	R=	2.0RE	16 - 1976/359/	8.67H	R=	19.0RE
3 - 1976/357/	22.50H	R=	2.1RE	10 - 1976/357/	23.58H	R=	2.5RE	17 - 1976/359/	13.17H	R=	16.9RE
4 - 1976/357/	22.92H	R=	1.6RE	11 - 1976/358/	0.33H	R=	4.1RE	18 - 1976/359/	15.67H	R=	15.2RE
5 - 1976/357/	23.00H	R=	1.6RE	12 - 1976/358/	5.08H	R=	11.5RE	19 - 1976/359/	16.67H	R=	14.5RE
6 - 1976/357/	23.08H	R=	1.7RE	13 - 1976/358/	12.50H	R=	17.2RE	20 - 1976/359/	17.83H	R=	13.5RE
7 - 1976/357/	23.17H	R=	1.8RE	14 - 1976/358/	18.67H	R=	19.6RE				

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/357 /19.00H TO1976/359 /20.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/359/ 20.17H	LAT=	62.7	11 - 1976/360/ 22.00H	LAT=	76.2
2 - 1976/360/ 1.33H	LAT=	3.0	12 - 1976/361/ 1.00H	LAT=	78.8
3 - 1976/360/ 2.00H	LAT=	-60.1	13 - 1976/361/ 3.00H	LAT=	80.1
4 - 1976/360/ 2.25H	LAT=	-75.2	14 - 1976/361/ 4.50H	LAT=	81.0
5 - 1976/360/ 3.25H	LAT=	5.6	15 - 1976/361/ 5.50H	LAT=	81.4
6 - 1976/360/ 4.32H	LAT=	28.5	16 - 1976/361/ 6.50H	LAT=	81.7
7 - 1976/360/ 5.75H	LAT=	42.0	17 - 1976/361/ 7.00H	LAT=	81.8
8 - 1976/360/ 7.42H	LAT=	56.6	18 - 1976/361/ 8.50H	LAT=	81.9
9 - 1976/360/ 9.67H	LAT=	58.0	19 - 1976/361/ 14.00H	LAT=	79.4
10 - 1976/360/ 13.00H	LAT=	69.0	20 - 1976/361/ 20.67H	LAT=	70.0

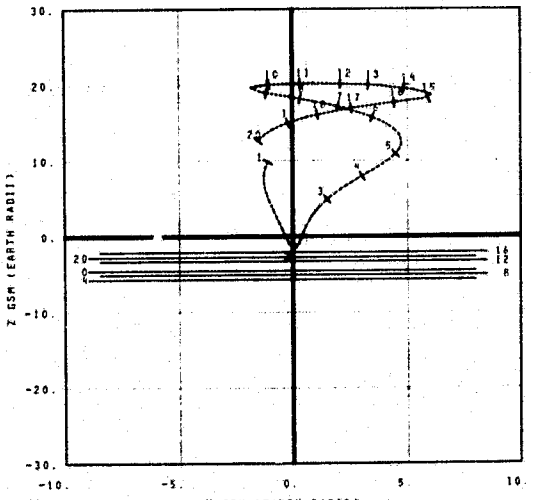
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/359/20.00H TO 1976/361/21.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/359/ 20.17H	R=	11.1RE	11 - 1976/361/ 3.00H	R=	20.3RE
2 - 1976/360/ 2.00H	R=	1.6RE	12 - 1976/361/ 4.50H	R=	20.3RE
3 - 1976/360/ 5.50H	R=	7.7RE	13 - 1976/361/ 5.50H	R=	20.3RE
4 - 1976/360/ 7.67H	R=	10.4RE	14 - 1976/361/ 7.00H	R=	20.1RE
5 - 1976/360/ 10.33H	R=	13.9RE	15 - 1976/361/ 11.00H	R=	19.2RE
6 - 1976/360/ 15.33H	R=	17.0RE	16 - 1976/361/ 13.50H	R=	18.3RE
7 - 1976/360/ 17.17H	R=	18.0RE	17 - 1976/361/ 15.50H	R=	17.4RE
8 - 1976/360/ 19.00H	R=	18.7RE	18 - 1976/361/ 17.00H	R=	16.5RE
9 - 1976/360/ 21.00H	R=	19.9RE	19 - 1976/361/ 18.50H	R=	15.5RE
10 - 1976/361/ 1.50H	R=	20.2RE	20 - 1976/361/ 21.00H	R=	13.5RE

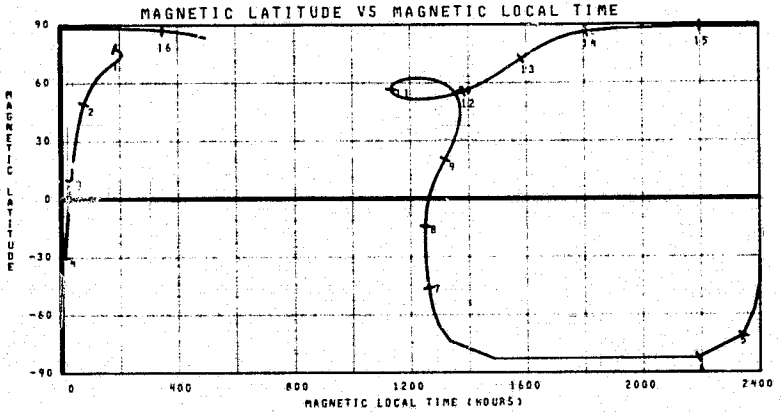
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/359/20.00H TO 1976/361/21.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

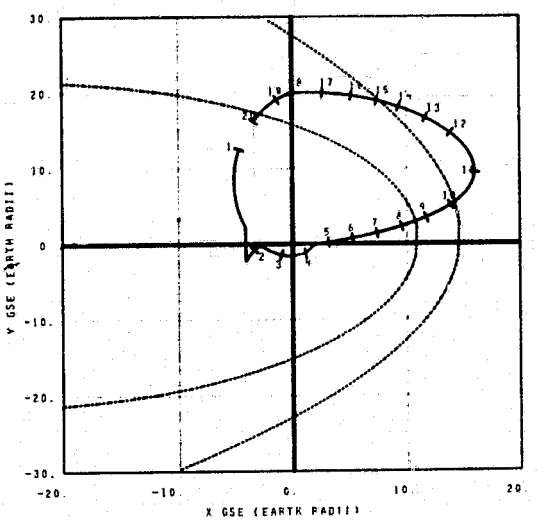
1 - 1976/359/ 20.17H	R=	11.1RE	8 - 1976/360/ 3.75H	R=	9.6RE	15 - 1976/361/ 10.00H	R=	19.9RE
2 - 1976/360/ 0.83H	R=	4.0RE	9 - 1976/360/ 7.75H	R=	10.7RE	16 - 1976/361/ 19.00H	R=	19.2RE
3 - 1976/360/ 1.67H	R=	2.2RE	10 - 1976/360/ 14.83H	R=	16.7RE			
4 - 1976/360/ 2.00H	R=	1.7RE	11 - 1976/360/ 23.08H	R=	19.9RE			
5 - 1976/360/ 2.25H	R=	1.7RE	12 - 1976/361/ 7.50H	R=	20.0RE			
6 - 1976/360/ 2.33H	R=	1.7RE	13 - 1976/361/ 13.00H	R=	18.5RE			
7 - 1976/360/ 2.83H	R=	2.4RE	14 - 1976/361/ 17.00H	R=	16.9RE			

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/359/20.00H TO1976/361/21.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/361/ 21.17H	LAT= 68.9	11 - 1976/362/ 21.67H	LAT= 72.6
2 - 1976/362/ 4.33H	LAT= 12.2	12 - 1976/363/ 3.67H	LAT= 78.3
3 - 1976/362/ 9.17H	LAT= -54.5	13 - 1976/363/ 5.67H	LAT= 79.8
4 - 1976/362/ 5.92H	LAT= -79.8	14 - 1976/363/ 7.17H	LAT= 80.7
5 - 1976/362/ 6.25H	LAT= -2.5	15 - 1976/363/ 8.17H	LAT= 81.2
6 - 1976/362/ 7.30H	LAT= 25.2	16 - 1976/363/ 9.17H	LAT= 81.5
7 - 1976/362/ 8.60H	LAT= 35.4	17 - 1976/363/ 10.17H	LAT= 81.8
8 - 1976/362/ 10.25H	LAT= 49.0	18 - 1976/363/ 11.17H	LAT= 81.9
9 - 1976/362/ 12.33H	LAT= 56.4	19 - 1976/363/ 14.67H	LAT= 81.2
10 - 1976/362/ 15.17H	LAT= 63.1	20 - 1976/363/ 20.17H	LAT= 76.2

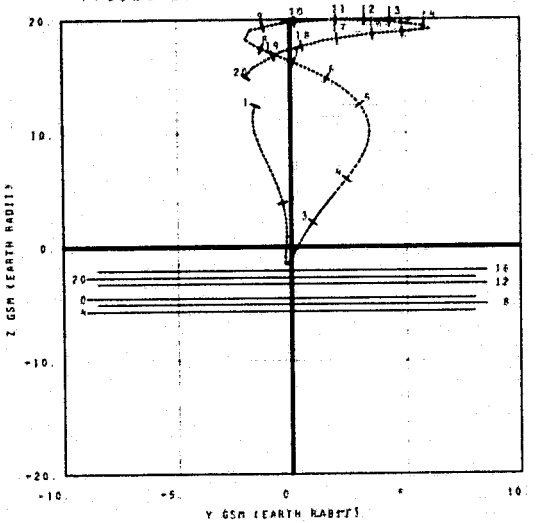
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGRECS

TIME INTERVAL OF PLOT 1976/361/21.00H TO 1976/363/22.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/361/ 21.17H	R= 13.9RE	11 - 1976/363/ 9.67H	R= 20.2RE
2 - 1976/362/ -9.00H	R= 6.0RE	12 - 1976/363/ 5.67H	R= 20.3RE
3 - 1976/362/ 7.32H	R= 5.3RE	13 - 1976/363/ 6.67H	R= 20.3RE
4 - 1976/362/ 9.50H	R= 6.8RE	14 - 1976/363/ 8.67H	R= 20.3RE
5 - 1976/362/ 14.67H	R= 19.3RE	15 - 1976/363/ 13.17H	R= 19.5RE
6 - 1976/362/ 17.00H	R= 16.1RE	16 - 1976/363/ 14.67H	R= 19.1RE
7 - 1976/362/ 18.83H	R= 17.2RE	17 - 1976/363/ 16.17H	R= 18.5RE
8 - 1976/362/ 20.83H	R= 18.2RE	18 - 1976/363/ 17.67H	R= 17.9RE
9 - 1976/363/ 1.67H	R= 19.8RE	19 - 1976/363/ 19.17H	R= 17.1RE
10 - 1976/363/ 3.17H	R= 20.0RE	20 - 1976/363/ 21.67H	R= 15.5RE

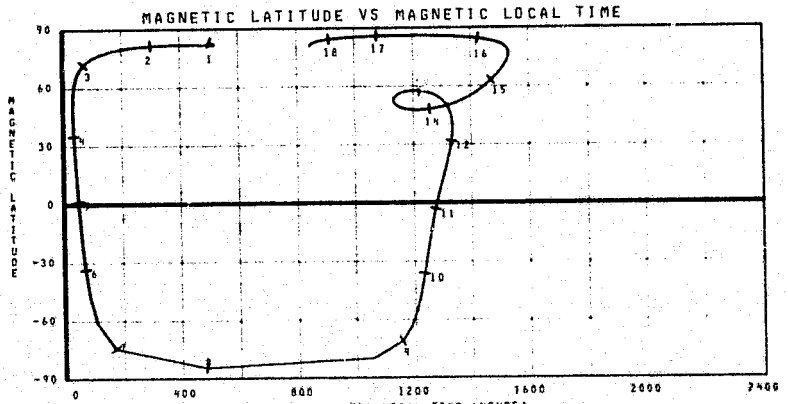
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/361/21.00H TO 1976/363/22.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

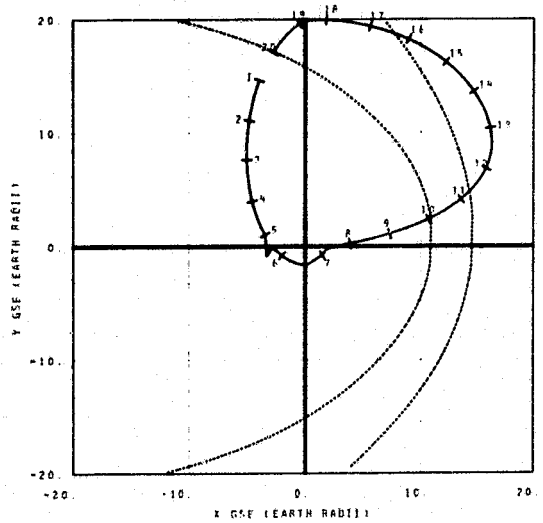
1 - 1976/361/ 21.17H	R= 13.9RE	8 - 1976/362/ 5.58H	R= 1.6RE	15 - 1976/363/ 11.17H	R= 20.0RE
2 - 1976/362/ 1.50H	R= 8.4RE	9 - 1976/362/ 5.75H	R= 2.1RE	16 - 1976/363/ 12.17H	R= 19.1RE
3 - 1976/362/ 3.17H	R= 5.7RE	10 - 1976/362/ 6.75H	R= 3.1RE	17 - 1976/363/ 13.67H	R= 17.9RE
4 - 1976/362/ 4.58H	R= 2.8RE	11 - 1976/362/ 7.33H	R= 3.7RE	18 - 1976/363/ 15.67H	R= 16.0RE
5 - 1976/362/ 5.00H	R= 2.0RE	12 - 1976/362/ 11.50H	R= 11.3RE		
6 - 1976/362/ 5.25H	R= 1.6RE	13 - 1976/362/ 18.33H	R= 16.9RE		
7 - 1976/362/ 5.50H	R= 1.7RE	14 - 1976/363/ 9.67H	R= 20.2RE		

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/361/21.00H TO1976/363/22.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/363/	22.17H	LAT=	73.2	11 -	1976/364/	17.67H	LAT= 61.6
2 -	1976/364/	1.67H	LAT=	65.7	12 -	1976/364/	22.17H	LAT= 69.1
3 -	1976/364/	4.17H	LAT=	56.2	13 -	1976/365/	3.00H	LAT= 74.8
4 -	1976/364/	6.17H	LAT=	41.0	14 -	1976/365/	6.50H	LAT= 78.0
5 -	1976/364/	7.42H	LAT=	16.4	15 -	1976/365/	9.00H	LAT= 79.8
6 -	1976/364/	8.08H	LAT=	-20.5	16 -	1976/365/	11.00H	LAT= 81.0
7 -	1976/364/	8.67H	LAT=	-79.1	17 -	1976/365/	12.50H	LAT= 81.6
8 -	1976/364/	9.83H	LAT=	11.1	18 -	1976/365/	14.00H	LAT= 81.9
9 -	1976/364/	11.75H	LAT=	38.9	19 -	1976/365/	16.00H	LAT= 81.8
10 -	1976/364/	14.33H	LAT=	52.5	20 -	1976/365/	22.00H	LAT= 77.9

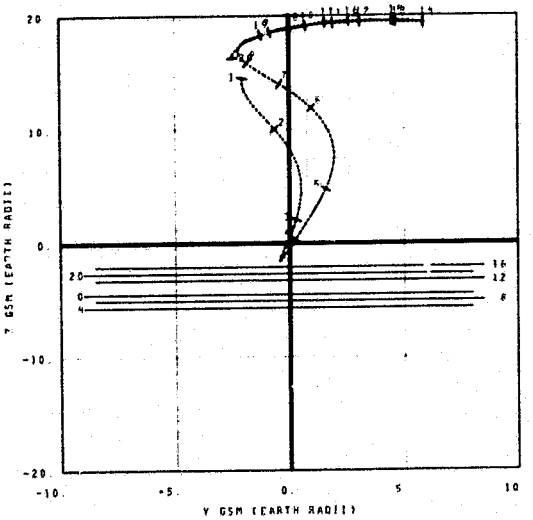
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/363/22.00H TO 1976/365/23.00H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 -	1976/363/	22.17H	R=	15.2RE	11 -	1976/365/	5.00H	R= 19.8RE
2 -	1976/364/	2.50H	R=	11.2RE	12 -	1976/365/	6.00H	R= 20.0RE
3 -	1976/364/	7.00H	R=	4.5RE	13 -	1976/365/	7.50H	R= 20.2RE
4 -	1976/364/	9.67H	R=	3.4RE	14 -	1976/365/	10.00H	R= 20.3RE
5 -	1976/364/	11.92H	R=	7.7RE	15 -	1976/365/	13.50H	R= 20.1RE
6 -	1976/364/	17.00H	R=	13.4RE	16 -	1976/365/	15.50H	R= 19.7RE
7 -	1976/364/	19.17H	R=	15.3RE	17 -	1976/365/	16.50H	R= 19.5RE
8 -	1976/364/	21.67H	R=	17.0RE	18 -	1976/365/	18.00H	R= 19.1RE
9 -	1976/365/	2.50H	R=	19.1RE	19 -	1976/365/	19.50H	R= 18.5RE
10 -	1976/365/	4.00H	R=	19.6RE	20 -	1976/365/	23.00H	R= 16.8RE

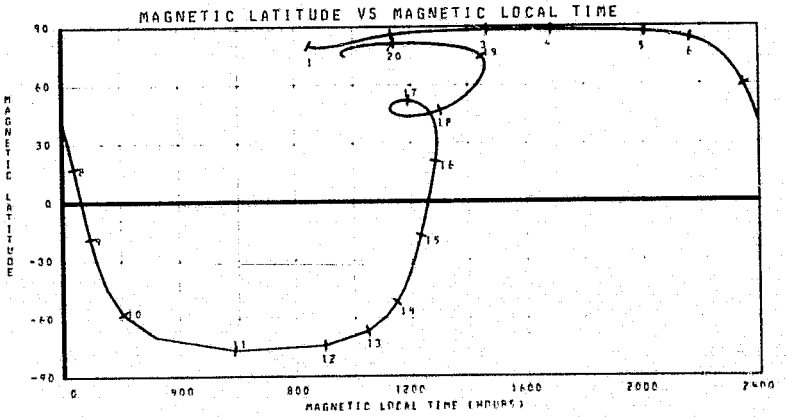
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/363/22.00H TO 1976/365/23.00H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

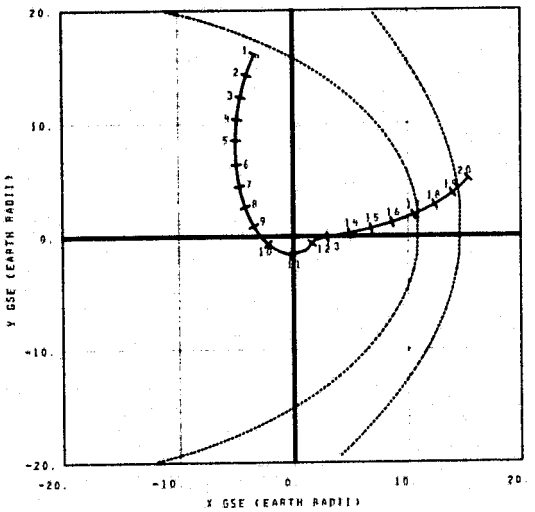
1 -	1976/363/	22.17H	R=	15.2RE	8 -	1976/364/	8.00H	R= 2.4RE
2 -	1976/364/	3.50H	R=	10.0RE	9 -	1976/364/	8.33H	R= 1.8RE
3 -	1976/364/	4.17H	R=	9.2RE	10 -	1976/364/	8.58H	R= 1.6RE
4 -	1976/364/	4.33H	R=	8.9RE	11 -	1976/364/	8.75H	R= 1.7RE
5 -	1976/364/	4.67H	R=	8.5RE	12 -	1976/364/	8.83H	R= 1.8RE
6 -	1976/364/	5.17H	R=	7.7RE	13 -	1976/364/	8.92H	R= 2.0RE
7 -	1976/364/	7.00H	R=	4.5RE	14 -	1976/364/	9.08H	R= 2.3RE
					15 -	1976/364/	9.75H	R= 3.8RE
					16 -	1976/364/	12.00H	R= 7.8RE
					17 -	1976/364/	18.83H	R= 15.1RE
					18 -	1976/365/	6.50H	R= 20.1RE
					19 -	1976/365/	15.00H	R= 19.9RE
					20 -	1976/365/	18.50H	R= 18.9RE

TIME AS YEAR/DAY/HOUR

TIME INTERVAL OF PLOT 1976/363 /22.00H TO1976/365 /23.00H

HAWKEYE-1

ROTATED INTO THE GSE X-Y PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/365/ 23.50 H	LAT= 76.1	11 - 1976/366/ 11.75 H	LAT= -79.6
2 - 1976/366/ 1.83 H	LAT= 72.5	12 - 1976/366/ 11.92 H	LAT= -67.7
3 - 1976/366/ 3.83 H	LAT= 68.4	13 - 1976/366/ 12.58 H	LAT= -6.2
4 - 1976/366/ 5.50 H	LAT= 63.8	14 - 1976/366/ 13.50 H	LAT= 21.4
5 - 1976/366/ 6.83 H	LAT= 58.9	15 - 1976/366/ 14.58 H	LAT= 35.7
6 - 1976/366/ 8.17 H	LAT= 51.7	16 - 1976/366/ 15.83 H	LAT= 49.7
7 - 1976/366/ 9.17 H	LAT= 43.3	17 - 1976/366/ 17.33 H	LAT= 51.7
8 - 1976/366/ 10.00 H	LAT= 31.9	18 - 1976/366/ 19.17 H	LAT= 57.5
9 - 1976/366/ 10.67 H	LAT= 15.2	19 - 1976/366/ 21.17 H	LAT= 62.1
10 - 1976/366/ 11.25 H	LAT= -17.0	20 - 1976/366/ 23.50 H	LAT= 64.3

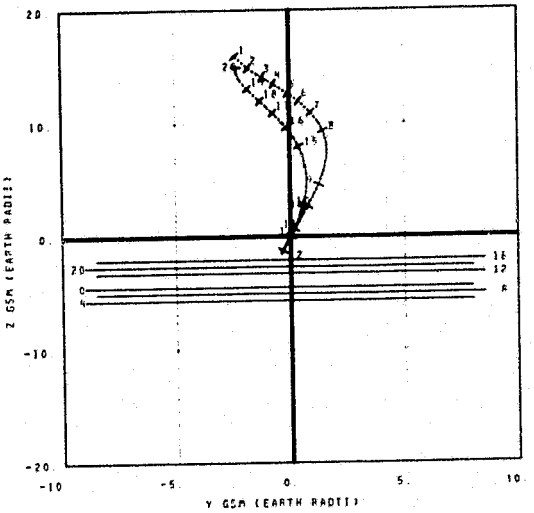
TIME AS YEAR/DAY/HOUR

LAT IS GSE LATITUDE IN DEGREES

TIME INTERVAL OF PLOT 1976/365/23.00H TO 1976/366/23.90H

HAWKEYE-1

PROJECTED ONTO THE GSM Y-Z PLANE



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/365/ 23.50 H	R= 16.5RE	11 - 1976/366/ 10.75 H	R= 3.3RE
2 - 1976/366/ 1.00 H	R= 15.5RE	12 - 1976/366/ 11.50 H	R= 1.4RE
3 - 1976/366/ 2.00 H	R= 14.7RE	13 - 1976/366/ 12.75 H	R= 3.3RE
4 - 1976/366/ 2.67 H	R= 14.2RE	14 - 1976/366/ 13.90 H	R= 5.6RE
5 - 1976/366/ 3.50 H	R= 13.9RE	15 - 1976/366/ 17.00 H	R= 10.3RE
6 - 1976/366/ 4.17 H	R= 12.8RE	16 - 1976/366/ 18.25 H	R= 11.7RE
7 - 1976/366/ 5.00 H	R= 12.0RE	17 - 1976/366/ 19.33 H	R= 12.8RE
8 - 1976/366/ 6.17 H	R= 10.7RE	18 - 1976/366/ 20.33 H	R= 13.7RE
9 - 1976/366/ 9.00 H	R= 6.7RE	19 - 1976/366/ 21.50 H	R= 14.7RE
10 - 1976/366/ 9.92 H	R= 5.1RE	20 - 1976/366/ 23.83 H	R= 16.3RE

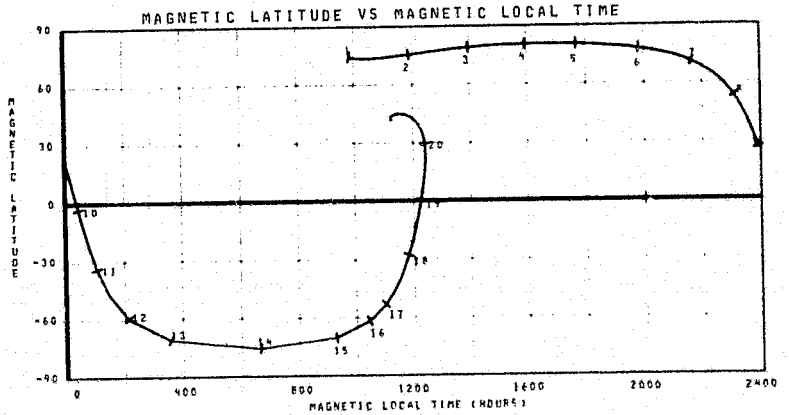
TIME AS YEAR/DAY/HOUR

R IS GEOCENTRIC DISTANCE IN EARTH RADII

TIME INTERVAL OF PLOT 1976/365/23.00H TO 1976/366/23.90H

HAWKEYE-1

MAGNETIC LATITUDE VS MAGNETIC LOCAL TIME



INTERPRETATION OF TIME CODE-NUMBERS

1 - 1976/365/ 23.50 H	R= 16.5RE	8 - 1976/366/ 10.08 H	R= 4.7RE	15 - 1976/366/ 12.00 H	R= 1.0RE
2 - 1976/366/ 3.50 H	R= 13.4RE	9 - 1976/366/ 10.92 H	R= 3.0RE	16 - 1976/366/ 12.08 H	R= 1.9RE
3 - 1976/366/ 5.33 H	R= 11.4RE	10 - 1976/366/ 11.33 H	R= 2.1RE	17 - 1976/366/ 12.17 H	R= 2.1RE
4 - 1976/366/ 6.33 H	R= 10.5RE	11 - 1976/366/ 11.58 H	R= 1.7RE	18 - 1976/366/ 12.50 H	R= 2.8RE
5 - 1976/366/ 7.00 H	R= 9.6RE	12 - 1976/366/ 11.75 H	R= 1.4RE	19 - 1976/366/ 13.25 H	R= 4.4RE
6 - 1976/366/ 7.83 H	R= 8.5RE	13 - 1976/366/ 11.83 H	R= 1.6RE	20 - 1976/366/ 15.33 H	R= 8.0RE
7 - 1976/366/ 8.83 H	R= 7.0RE	14 - 1976/366/ 11.92 H	R= 1.7RE		

TIME AS YEAR/DAY/HOUR